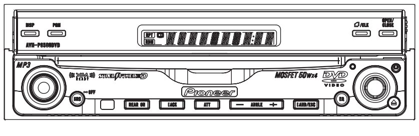
Pioneer sound.vision.soul

Service Manual


AVH-P6500DVD/UC

ORDER NO.
CRT3038

AV RECEIVER/DVD PLAYER WITH 6.5 INCH WIDE DISPLAY

AVH-P6500DVD UC
AVH-P6500DVD EW
AVH-P6550DVD RC,RD

- This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech. Module	Remarks
CX-3016	CRT3056	MS3	DVD Mech. Module:Circuit Description, Mech.Description, Disassembly

NOTE:

- **Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories. Confidential unpublished works. © 1992-1997 Dolby Laboratories. All rights reserved.**
- **Inverter for LCD back light becomes a high voltage.**

For details, refer to "Important symbols for good services".

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● DVD Player Service Precautions

1. Before disassembling the unit, be sure to turn off the power. Unplugging and plugging the connectors during power-on mode may damage the ICs inside the unit.
2. To protect the pickup unit from electrostatic discharge during servicing, take an appropriate treatment (shorting-solder) by referring to “ the DISASSEMBLY” on page 167.
3. Please adjusting the skew after changing the pickup unit(see page 133).
4. During disassembly, be sure to turn the power off since an internal IC might be destroyed when a connector is plugged or unplugged.

SAFETY INFORMATION

UC

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

EW

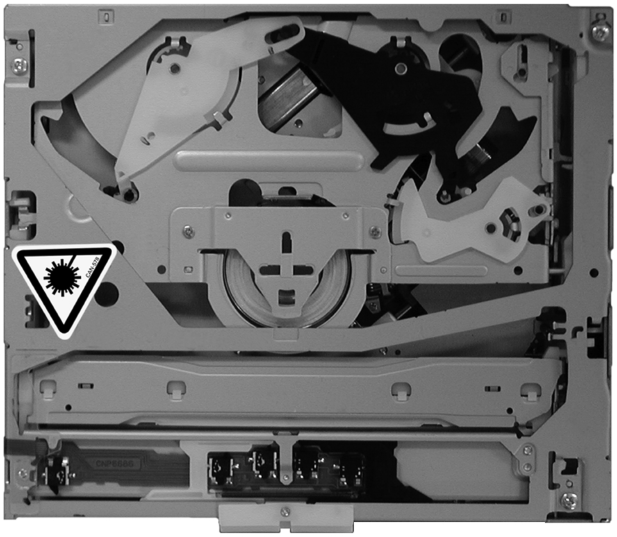
1. Safety Precautions for those who Service this Unit.

- **Follow the adjustment steps (see pages 129 through 166)in the service manual when servicing this unit. When checking or adjusting the emitting power of the laser diode exercise caution in order to get safe, reliable results.**

Caution:

1. **During repair or tests, minimum distance of 13cm from the focus lens must be kept.**
2. **During repair or tests, do not view laser beam for 10 seconds or longer.**

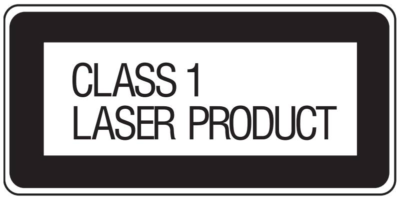
2. The triangular label is attached to the mechanism unit frame.



CAUTION
This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product.
Refer all servicing to qualified personnel.

The following caution label appears on your unit.

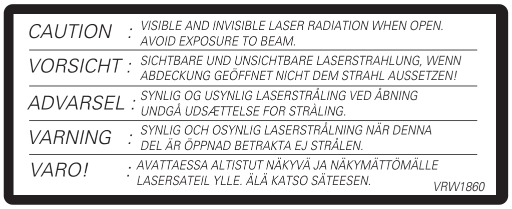
Location: on the bottom of the unit



CLASS 1
LASER PRODUCT

En

On the top of the player.



CAUTION : VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
VORSICHT : SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG, WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN!
ADVARSEL : SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING UNDGÅ UDSÆTTELSE FOR STRÀLING.
VARNING : SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD BETRAKTA EJ STRÅLEN.
VARO! : AVATTAESSA ALTISTUT NÄKYVÄ JA NÄKYMÄTTÖMÄLLE LASERSATEIL YLLE. ÄLÄ KATSO SÄTEESEN.
VRW1860

WARNING!

The AEL (accessible emission level)of the laser power output is less than CLASS 1 but the laser component is capable of emitting radiation exceeding the limit for CLASS 1.
A specially instructed person should do servicing operation of the apparatus.

Laser diode characteristics

Wave length:
DVD:640~660nm
CD:770~810nm
Maximum output:2.44mw(Emitting period :9sec.)
DVD:743mw(Emitting period : unlimited)

Additionla Laser Caution

Transistors Q1101 and Q1102 in PCB drive the laser diodes for DVD and CD respectively. When Q1101 or Q1102 is shorted between their terminals, the laser diodes for DVD or CD will radiate beam. If the top cover is removed with no disc loaded while such short-circuit is continued, the naked eyes may be exposed to the laser beam.

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replaced only with the same or equivalent type recommended by the manufacture.
Discord used batteries according to the manufacture's instructions.

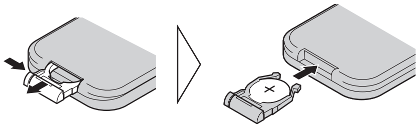
ES

Battery

Slide the tray out on the back of the remote controller and insert the battery with the (+) and (–) poles pointing in the proper direction.

Note :

- Use a CR2025 (3V) lithium battery only. Never use other types of battery with this unit.



CAUTION

Danger of explosion if battery is incorrectly replaced.
Replaced only with the same or equivalent type.

[Important symbols for good services]

In this manual, the symbols shown-below indicate that adjustments, settings or cleaning should be made securely.
When you find the procedures bearing any of the symbols, be sure to fulfill them:

1. Product safety

You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

2. Adjustments

To keep the original performances of the product, optimum adjustments or specification confirmation is indispensable. In accordance with the procedures or instructions described in this manual, adjustments should be performed.

3. Cleaning

For optical pickups, tape-deck heads, lenses and mirrors used in projection monitors, and other parts requiring cleaning, proper cleaning should be performed to restore their performances.

4. Shipping mode and shipping screws

To protect the product from damages or failures that may be caused during transit, the shipping mode should be set or the shipping screws should be installed before shipping out in accordance with this manual, if necessary.

5. Lubricants, glues, and replacement parts

Appropriately applying grease or glue can maintain the product performances. But improper lubrication or applying glue may lead to failures or troubles in the product. By following the instructions in this manual, be sure to apply the prescribed grease or glue to proper portions by the appropriate amount.For replacement parts or tools, the prescribed ones should be used.

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1. SPECIFICATIONS

General

Power source	14.4 V DC (10.8 – 15.1 V allowable)
Grounding system	Negative type
Backup current	5mA or less
Head unit:	
Max. current consumption	10.0 A
Dimensions (W × H × D):	
DIN	
Chassis	178 × 50 × 160 mm (7 × 2 × 6-1/4 in.)
Nose	188 × 58 × 36 mm (7-3/8 × 2-1/4 × 1-3/8 in.)
D	
Chassis	178 × 50 × 165 mm (7 × 2 × 6-1/2 in.)
Nose	170 × 46 × 31 mm (6-3/4 × 1-3/4 × 1-1/4 in.)
Weight	2.2 kg (4.8 lbs)
Hideaway unit:	
Max. current consumption	1.0 A
Dimensions (W × H × D)	150 × 28 × 100 mm (5-7/8 × 1-1/8 × 3-7/8 in.)
Weight	0.3 kg (0.7 lbs)

Display

Screen size/aspect ratio	6.5 inch wide/16:9 (effective display area: 146 × 79 mm)
Pixels	336,960 (1,440 × 234)
Type	TFT active matrix, transmissive type
Color system	NTSC compatible
Operating temperature range	–10 – +50 °C
Storage temperature range	–20 – +80 °C
Angle adjustment	50 – 110° (initial settings: 110°)

Audio

Continuous power output is 22 W per channel minimum into 4 ohms, both channels driven 50 to 15,000 Hz with no more than 5% THD.

Maximum power output	50 W × 4 50 W × 2/4 Ω + 70 W × 1/2 Ω (for subwoofer)
Load impedance	4 Ω (4 – 8 Ω [2 Ω for 1 ch] allowable)
Preout max output level/output impedance	4.0 V/100Ω
Equalizer (3-Band Parametric Equalizer):	
Low	
Frequency	40/80/100/160 Hz
Q Factor	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain	±12dB
Mid	
Frequency	200/500/1k/2k Hz
Q Factor	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain	±12dB
High	
Frequency	3.15k/8k/10k/12.5k Hz
Q Factor	0.35/0.59/0.95/1.15 (+6 dB when boosted)
Gain	±12dB
Loudness contour	
Low	+3.5 dB (100 Hz), +3 dB (10 kHz)
Mid	+10 dB (100 Hz), +6.5 dB (10 kHz)
High	+11 dB (100 Hz), +11 dB (10 kHz) (volume: –30 dB)
Tone controls:	
Bass	
Frequency	40/63/100/160 Hz
Gain	±12dB
Treble	
Frequency	2.5k/4k/6.3k/10k Hz
Gain	±12dB
HPF:	
Frequency	50/80/125 Hz
Slope	–12 dB/oct
Subwoofer:	
Frequency	50/80/125 Hz
Slope	–18 dB/oct
Gain	±12dB
Phase	Normal/Reverse

DVD Player

System	DVD video, Video CD, Compact disc audio system
Usable discs	DVD video, Video CD, Compact disc
Region number	1(UC model) 2(EW model) 3(RC model) 4(RD model)
Signal format:	
Sampling frequency	44.1/48/96 kHz

Number of quantization bits	16/20/24; linear
Frequency response	5 – 44,000 Hz (with DVD, at sampling frequency 96 kHz)
Signal-to-noise ratio	97 dB (1 kHz) (IHF-A network) (CD: 96 dB (1 kHz) (IHF-A network))
Dynamic range	95 dB (1 kHz) (CD: 94 dB (1 kHz))
Distortion	0.008 % (1 kHz)
Output level:	
Video	1.0 Vp-p/75 Ω (±0.2 V)
Audio	1.0 V (1 kHz, 0 dB)
Number of channels	2 (stereo)
MP3 decoding format	MPEG-1 & 2 Audio Layer 3

FM tuner (UC model)

Frequency range	87.9 – 107.9 MHz
Usable sensitivity	8 dBf (0.7 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity	10 dBf (0.9 µV/75 Ω, mono)
Signal-to-noise ratio	75 dB (IHF-A network)
Distortion	0.3 % (at 65 dBf, 1 kHz, stereo) 0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response	30 – 15,000 Hz (±3 dB)
Stereo separation	45 dB (at 65 dBf, 1 kHz)
Selectivity	80 dB (±200 kHz)
Three-signal intermodulation (desired signal level)	30 dBf (two undesired signal level: 100 dBf)

AM tuner (UC model)

Frequency range	530 – 1,710 kHz (10 kHz)
Usable sensitivity	18 µV (S/N: 20 dB)
Signal-to-noise ratio	65 dB (IHF-A network)

FM tuner (EW model)

Frequency range	87.5 – 108.0 MHz
Usable sensitivity	8 dBf (0.7 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity	10 dBf (0.9 µV/75 Ω, mono)
Signal-to-noise ratio	75 dB (IEC-A network)
Distortion	0.3 % (at 65 dBf, 1 kHz, stereo) 0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response	30 – 15,000 Hz (±3 dB)
Stereo separation	45 dB (at 65 dBf, 1 kHz)
Selectivity	80 dB (±200 kHz)

MW tuner (EW model)

Frequency range	531 – 1,602 kHz (9 kHz)
Usable sensitivity	18 µV (S/N: 20 dB)
Signal-to-noise ratio	65 dB (IEC-A network)

LW tuner (EW model)

Frequency range	153 – 281 kHz
Usable sensitivity	30 µV (S/N: 20 dB)
Signal-to-noise ratio	65 dB (IEC-A network)

FM tuner (RC,RD model)

Frequency range	87.5 – 108.0 MHz
Usable sensitivity	8 dBf (0.7 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity	10 dBf (0.9 µV/75 Ω, mono)
Signal-to-noise ratio	75 dB (IEC-A network)
Distortion	0.3 % (at 65 dBf, 1 kHz, stereo) 0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response	30 – 15,000 Hz (±3 dB)
Stereo separation	45 dB (at 65 dBf, 1 kHz)

AM tuner (RC,RD model)

Frequency range	531 – 1,602 kHz (9 kHz) 530 – 1,640 kHz (10 kHz)
Usable sensitivity	18 µV (S/N: 20 dB)
Signal-to-noise ratio	65 dB (IEC-A network)

Infrared remote control

Wavelength	945 nm
Output	typ; 10 mw/sr per Infrared LED

Note

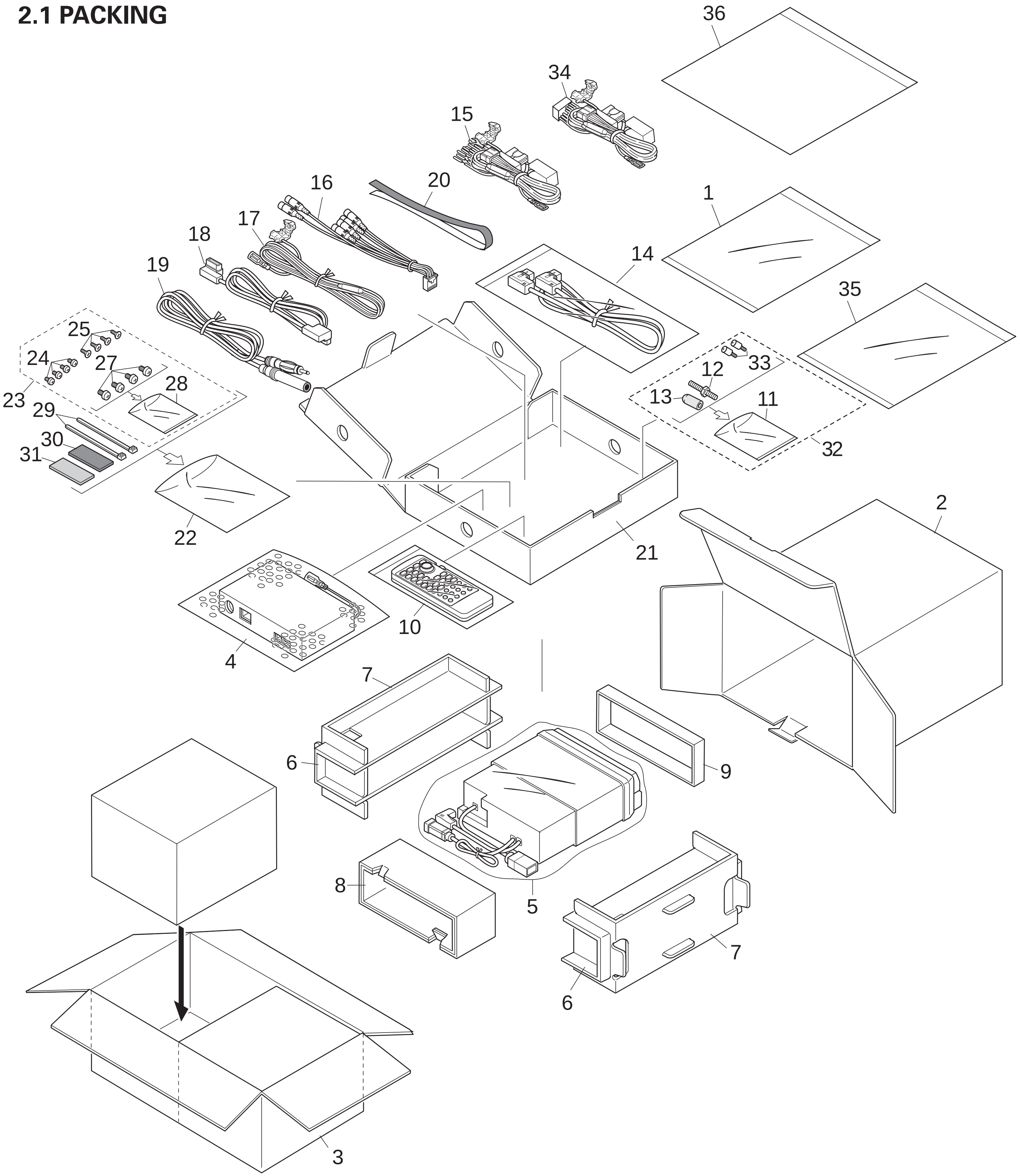
Specifications and the design are subject to possible modifications without notice due to improvements. ■

2. EXPLODED VIEWS AND PARTS LIST

NOTE:

- Parts marked by "*" are generally unavailable because they are not in our Master Spare Parts List.
- Screws adjacent to ∇ mark on the product are used for disassembly.
- For the applying amount of lubricants or glue, follow the instructions in this manual.
  (In the case of no amount instructions, apply as you think it appropriate.)

2.1 PACKING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● PACKING SECTION PARTS LIST

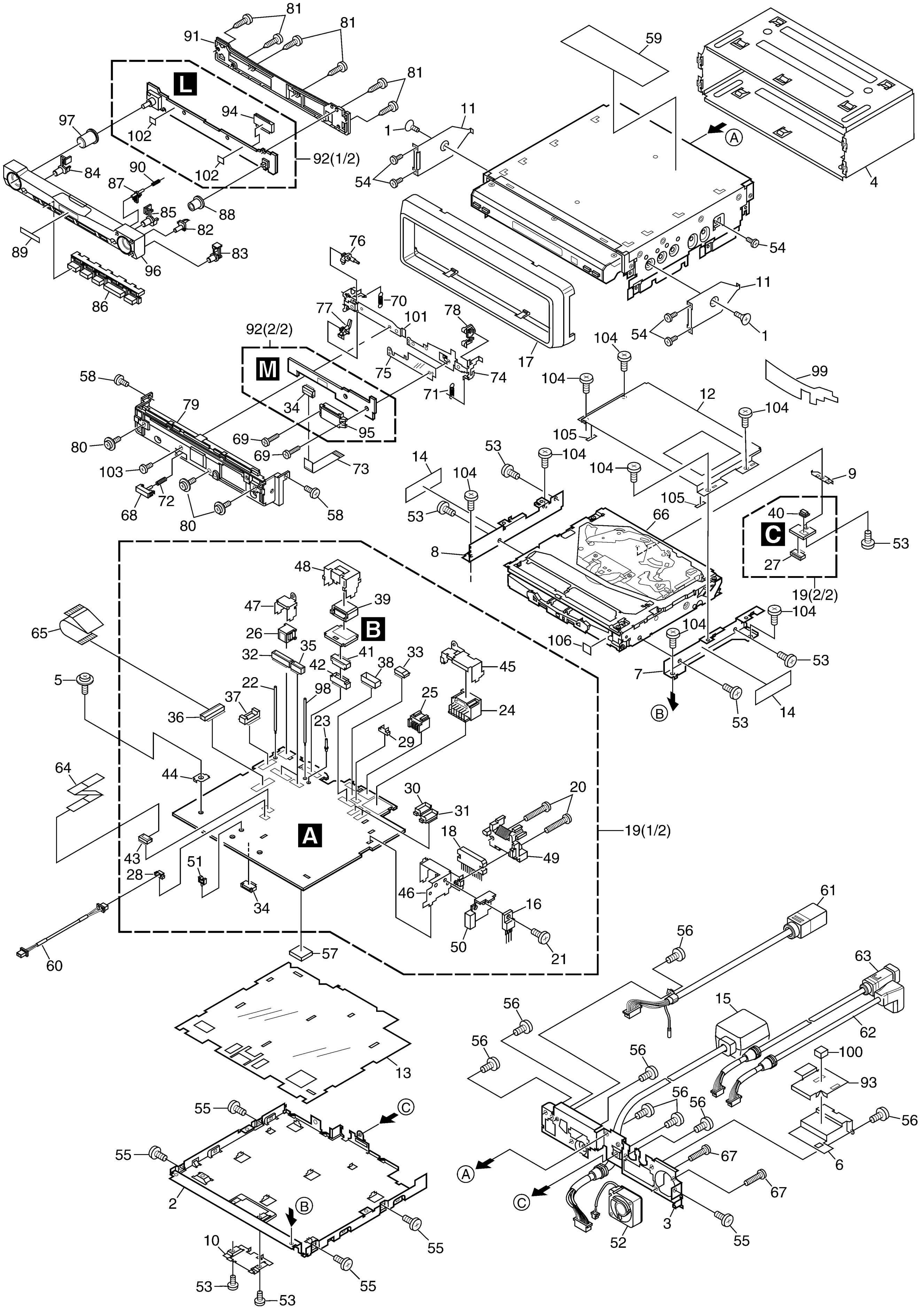
Mark	No.	Description	Part No.			
			P6500DVD/UC	P6500DVD/EW	P6550DVD/RC	P6550DVD/RD
*	1-1	Polyethylene Bag	CEG1116	CEG1116	CEG1116	CEG1116
	1-2	Owner's Manual	CRB1836	CRB1830	CRB1838	CRB1838
	1-3	Owner's Manual	CRB1837	CRB1831	CRB1839	CRB1840
	1-4	Installation Manual	CRD3782	CRD3781	CRD3783	CRD3784
*	1-5	Card	ARY1048	Not used	Not used	Not used
	2	Carton	CHG5077	CHG5076	CHG5078	CHG5079
	3	Contain Box	CHL5077	CHL5076	CHL5078	CHL5079
	4	Air Cushioned Bag	CEG1089	CEG1089	CEG1089	CEG1089
	5	Polyethylene Bag	CEG1173	CEG-162	CEG-162	CEG-162
	6	Protector	CHP2707	CHP2707	CHP2707	CHP2707
	7	Protector	CHP2706	CHP2706	CHP2706	CHP2706
	8	Protector	CHP2387	CHP2387	CHP2387	CHP2387
	9	Protector	CHP2708	CHP2708	CHP2708	CHP2708
	10	Remote Control Unit	CXC1224	CXC1226	CXC1226	CXC1226
*	11	Polyethylene Bag	E36-615	E36-615	E36-615	E36-615
	12	Screw	CBA1650	CBA1650	CBA1650	CBA1650
	13	Bush	CNV1917	CNV1917	CNV1917	CNV1917
	14	Cord Assy	CDE7168	CDE7168	CDE7168	CDE7168
	15	Cord Assy	CDE7193	Not used	CDE7193	CDE7193
	16	Cord Assy	CDE7194	CDE7194	CDE7194	CDE7194
	17	Cord Assy	CDE7321	CDE7321	CDE7321	CDE7321
	18	Cord Assy	CDE7187	CDE7187	CDE7187	CDE7187
	19	Antenna Cable	CDH1281	CDH1281	CDH1281	CDH1281
	20	Sheet	CNM7244	CNM7244	CNM7244	CNM7244
	21	Sub Craton	CHG5080	CHG5080	CHG5080	CHG5080
*	22	Polyethylene Bag	CEG-158	CEG-158	CEG-158	CEG-158
	23	Screw Assy	CEA3686	CEA3686	CEA3686	CEA3686
	24	Screw	CBA1468	CBA1468	CBA1468	CBA1468
	25	Screw	CMZ50P060FTC	CMZ50P060FTC	CMZ50P060FTC	CMZ50P060FTC
	27	Screw	BMZ50P060FTC	BMZ50P060FTC	BMZ50P060FTC	BMZ50P060FTC
*	28	Polyethylene Sheet	CNM4338	CNM4338	CNM4338	CNM4338
*	29	Lock Tie	Not used	CNV-754	CNV-754	CNV-754
*	30	Fastener	CNM6544	CNM6544	CNM6544	CNM6544
*	31	Fastener	CNM6545	CNM6545	CNM6545	CNM6545
	32	Accessory Assy	CEA3685	CEA3685	CEA3743	CEA3743
	33	Fixing Screw	JGZ20P070FMC	JGZ20P070FMC	Not used	Not used
	34	Cord Assy	Not used	CDE7192	Not used	Not used
*	35-1	Polyethylene Bag	Not used	CEG1116	Not used	Not used
	35-2	Owner's Manual	Not used	CRB1832	Not used	Not used
	35-3	Owner's Manual	Not used	CRB1833	Not used	Not used
	35-4	Owner's Manual	Not used	CRB1834	Not used	Not used
	35-5	Owner's Manual	Not used	CRB1835	Not used	Not used
*	35-6	Passport	Not used	CRY1013	Not used	Not used
*	35-7	Warranty Card	Not used	CRY1157	Not used	Not used
*	35-8	Caution Card	CRP1298	CRP1298	Not used	Not used
	36	Cleaning Cloth Assy	CEA3952	CEA3952	CEA3952	CEA3952

● Owner's Manual, Installation Manual

Part No.	Language
CRB1836	English
CRB1837	French
CRD3782	English,French
CRB1830	English
CRB1831	Spanish
CRB1832	German
CRB1833	French
CRB1834	Italian

Part No.	Language
CRB1835	Dutch
CRD3781	English,Spanish,German, French,Italian,Dutch
CRB1838	English
CRB1839	Traditional chinese
CRB1840	Spanish
CRD3783	English,Traditional chinese
CRD3784	English,Spanish

2.2 EXTERIOR(1)



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(1) EXTERIOR(1) SECTION PARTS LIST

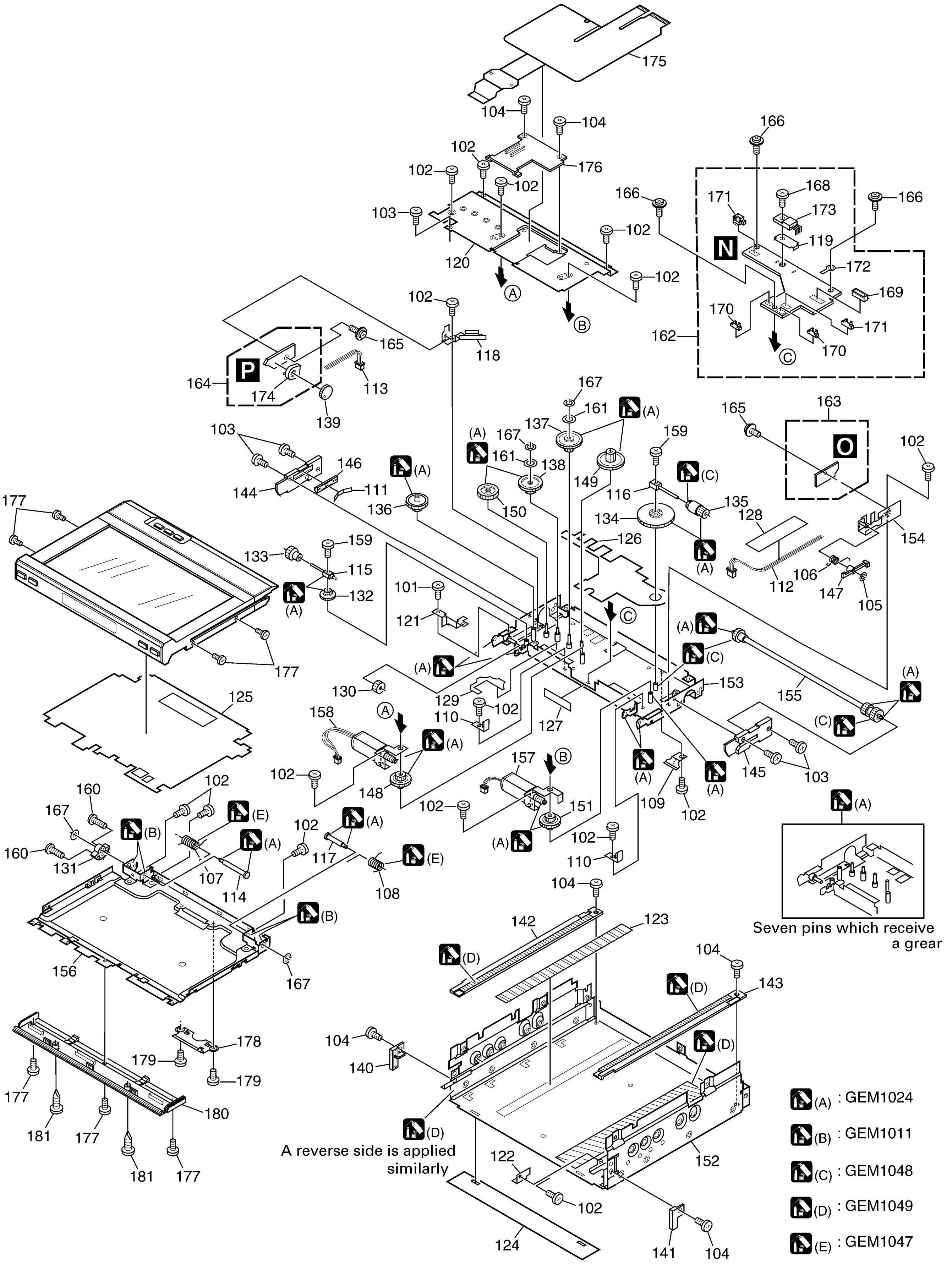
Mark	No.	Description	Part No.
	1	Screw	CMZ50P060FTC
	2	Case	See Contrast table(2)
	3	Panel	CNB2828
	4	Holder	CNC9510
	5	Screw	IMS26P050FTC
	6	Holder	CND1435
	7	Bracket	CND1438
	8	Bracket	CND1439
	9	Holder	CND1440
	10	Holder	CND1441
	11	Bracket	CND1482
	12	Bracket	CND1603
	13	Insulator	CNM8110
	14	Insulator	CNM8495
	15	Cord Assy	See Contrast table(2)
	16	Transistor(Q851)	2SD2375
	17	Panel	See Contrast table(2)
	18	IC(IC308)	PAL007A
	19	Mother Unit	See Contrast table(2)
	20	Screw	BMZ26P160FTC
	21	Screw	BSZ26P080FTC
	22	Clamper	CEF1009
	23	Terminal(CN155)	See Contrast table(2)
	24	Connector(CN701)	CKM1332
	25	Connector(CN301)	CKM1389
	26	Connector(CN972)	CKS1940
	27	Connector(CN1702)	CKS1944
	28	Connector(CN971)	CKS2191
	29	Connector(CN801)	CKS3124
	30	Connector(CN156)	CKS3131
	31	Connector(CN154)	CKS3132
	32	Connector(CN803)	CKS3751
	33	Connector(CN202)	CKS3902
	34	Connector(CN101,CN5901)	CKS3986
	35	Connector(CN805)	CKS4068
	36	Connector(CN203)	CKS4132
	37	Connector(CN152)	CKS4249
	38	Connector(CN151)	See Contrast table(2)
	39	Connector(CN1502)	CKS4467
	40	Connector(CN1701)	CKS4496
	41	Connector(CN1500)	CKS4680
	42	Connector(CN153)	CKS4681
	43	Connector(CN201)	CKS4691
	44	Holder	CNC5399
	45	Holder	CND1433
	46	Holder	CND1434
	47	Holder	CND1436
	48	Holder	CND1437
	49	Heat Sink	CNR1684
	50	Heat Sink	CNR1703
	51	Clamper	CNV1251
	52	Fan Motor	CXM1262
	53	Screw	BMZ20P025FTC
	54	Screw	BMZ20P030FZK
	55	Screw	BMZ26P030FZK
	56	Screw	BMZ26P040FTC
	57	Sheet	CNM8526
	58	Screw(M2x2)	CBA1551
	59	Label	See Contrast table(2)
	60	Cord	CDE6574
	61	Cord Assy	CDE7167
	62	Cord Assy	CDE7175
	63	Cord Assy	CDE7176
	64	Cable	CDE7178
	65	Cable	CDE7282
	66	DVD Mechanism Module(MS3)	CXK6310
	67	Screw	PMZ20P160FTC
	68	Button	CAC7953
	69	Screw	CBA1111
	70	Spring	CBH2681
	71	Spring	CBH2682
	72	Spring	CBH2683
	73	Cable	CDE7179
	74	Holder	CND1841
	75	Insulator	CNM8510
	76	Arm	CNV7567
	77	Arm	CNV7568
	78	Arm	CNV7569
	79	Panel Unit	See Contrast table(2)
	80	Screw(M2 x 4)	CBA1734
	81	Screw	BPZ20P080FZK
	82	Button(Detach)	See Contrast table(2)
	83	Button(Eject)	See Contrast table(2)
	84	Button(SRC)	CAC7946
	85	Button(EQ)	CAC7947
	86	Button	See Contrast table(2)
	87	Button(Reset)	See Contrast table(2)
	88	Button	CAC8149
*	89	Badge	See Contrast table(2)
	90	Spring	CBH2680
	91	Cover	CNS7441
	92	Keyboard Unit	See Contrast table(2)
	93	Sheet	CNM8514
	94	Connector(CN5501)	CKS4657
	95	Connector(CN5902)	CKS4658
	96	Grille Unit	See Contrast table(2)
	97	Knob Unit	CXC2034
	98	Clamper	See Contrast table(2)
	99	Sheet	CNM8515
	100	Cusion	CNM8516
	101	Holder	CND1840
	102	Insulator	CNM8521
	103	Screw(M2.6 x 2.5)	CBA1482
	104	Screw(M2.6 x 4)	CBA1738
	105	Spacer	CNM8552
	106	Spacer	CNM8575

(2) CONTRAST TABLE

AVX-P6500DVD/UC , AVX-P6500DVD/EW , AVX-P6550DVD/RC and AVX-P6550DVD/RD are constructed the same except for the following:

			Part No.			
Mark	No.	Description	P6500DVD/UC	P6500DVD/EW	P6550DVD/RC	P6550DVD/RD
	2	Case	CNB2910	CNB2910	CNB2911	CNB2911
	15	Cord Assy	CDE7177	CDE7177	Not used	Not used
	17	Panel	CNS7480	CNS7480	CNS7481	CNS7481
	19	Mother Unit	CWM8760	CWM8759	CWM8761	CWM8762
	23	Terminal(CN155)	CKF-047	CKF-047	Not used	Not used
	38	Connector(CN151)	CKS4454	CKS4454	Not used	Not used
	59	Label	Not used	VRW1860	Not used	Not used
	79	Panel Unit	CXC1895	CXC1895	CXC1896	CXC1896
	82	Button(Detach)	CAC7944	CAC7944	CXC7951	CXC7951
	83	Button(Eject)	CAC7945	CAC7945	CXC7950	CXC7950
	86	Button	CAC7948	CAC7948	CXC7949	CXC7949
	87	Button(Reset)	CAC8053	CAC8053	CXC8054	CXC8054
*	89	Badge	CAH1754	CAH1754	CAH1792	CAH1792
	92	Keyboard Unit	CWM8766	CWM8765	CWM8766	CWM8766
	96	Grille Unit	CXC2181	CXC2180	CXC2182	CXC2182
	98	Clamper	CEF1009	CEF1009	Not used	Not used

2.3 EXTERIOR(2)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(D)
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122
102
152
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104

Seven pins which receive a grear

(D) A reverse side is applied similarly

(A) : GEM1024

(B) : GEM1011

(C) : GEM1048

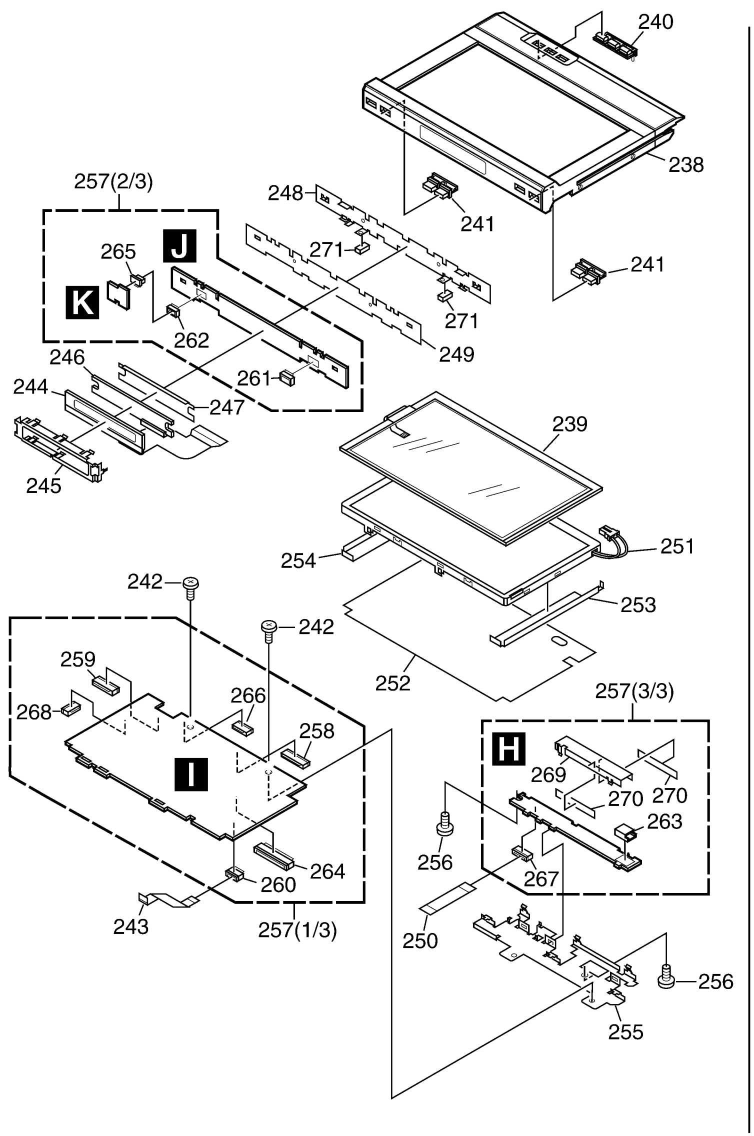
(D) : GEM1049

(E) : GEM1047

EXTERIOR(2) SECTION PARTS LIST

Mark	No.	Description	Part No.
	101	Screw(M2x3)	CBA1082
	102	Screw(M2x2)	CBA1250
	103	Screw(M2x4)	CBA1277
	104	Screw(M2x1.5)	CBA1615
	105	Washer	CBF1038
	106	Spring	CBH2645
	107	Spring	CBH2646
	108	Spring	CBH2647
	109	Spring	CBL1585
	110	Spring	CBL1586
	111	Spring	CBL1587
	112	Cord Assy	CDE7047
	113	Cord Assy	CDE7213
	114	Shaft	CLA4270
	115	Shaft	CLA4305
	116	Shaft	CLA4306
	117	Shaft	CLA4309
	118	Bracket	CND1221
	119	Heat Sink	CND1228
	120	Case	CND1229
	121	Holder	CND1318
	122	Holder	CND1449
	123	Sheet	CNM7939
	124	Sheet	CNM8037
	125	Insulator	CNM8048
	126	Insulator	CNM8158
	127	Sheet	CNM8159
	128	Tape	CNM8160
	129	Insulator	CNM8294
	130	Gear	CNR1664
*	131	Gear	CNR1665
	132	Gear	CNR1677
	133	Gear	CNR1678
	134	Gear	CNR1679
	135	Gear	CNR1680
	136	Gear	CNR1688
	137	Gear	CNR1708
	138	Gear	CNR1709
	139	Gear	CNV7383
	140	Holder	CNV7384
	141	Holder	CNV7385
	142	Rack	CNV7386
	143	Rack	CNV7387
*	144	Slider	CNV7388
	145	Slider	CNV7389
*	146	Holder	CNV7390
	147	Arm	CNV7391
	148	Gear	CNV7522
	149	Gear	CNV7523
	150	Gear	CNV7524
	151	Gear	CNV7529
	152	Chassis Unit	CXB9509
	153	Frame Unit	CXB9511
	154	Holder Unit	CXB9512
	155	Shaft Unit	CXB9513
	156	Holder Unit	CXB9514
	157	Motor Unit(M3001)(Position)	CXB9515
	158	Motor Unit(M3002)(Angle)	CXB9516
	159	Screw	CZB3082
	160	Screw	CZB3083
	161	Washer	CZB3084
	162	Main Unit	CZW3087
	163	SW Unit	CZW3088
	164	Volume Unit	CZW3089
	165	Screw	IMS20P020FTC
	166	Screw	IMS20P030FZK
	167	Washer	YE15FUC
	168	Screw	BMZ26P050FTC
	169	Connector(CN3801)	CKS4068
	170	Connector(CN3802,CN3803)	CKS3124
	171	Connector(CN3807,3809)	CKS3125
	172	Connector(CN3808)	CKF1064
	173	IC(IC3801)	BA00AST
	174	Volume(VR3841)	CCW1025
	175	Flexible PCB	CNP7118
	176	Holder	CNV7446
	177	Screw	CBA1484
	178	Holder	CND1314
	179	Screw	JFZ20P022FNI
	180	Cover	CNS7438
	181	Screw	BPZ20P060FZK

2.4 EXTERIOR(3)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242
259
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268
258
I
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257(3/3)
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263
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257(1/3)
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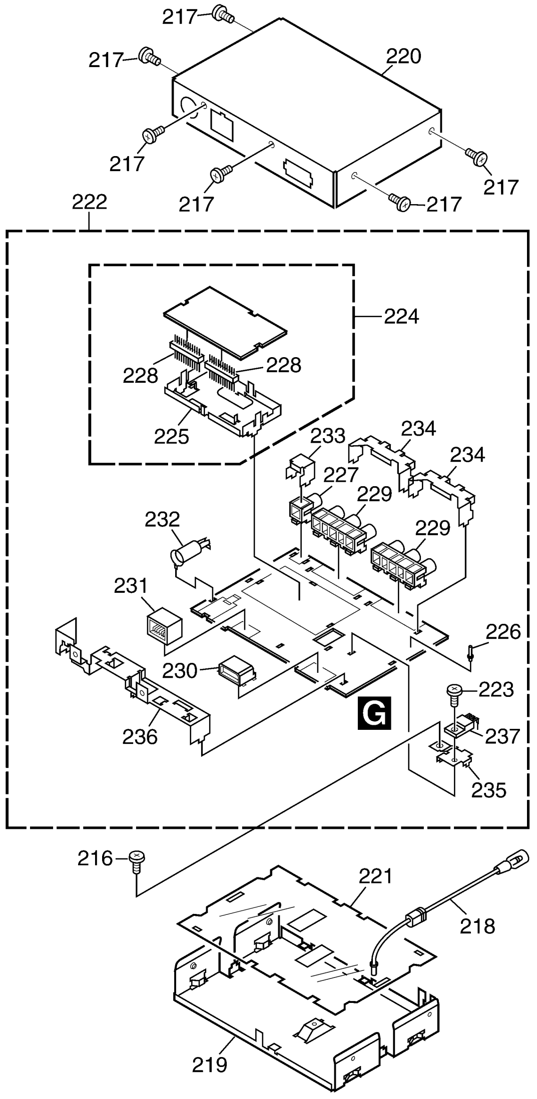
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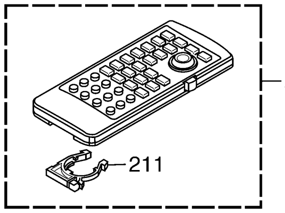

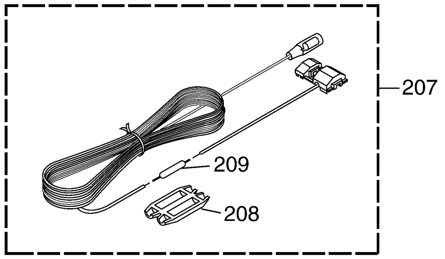

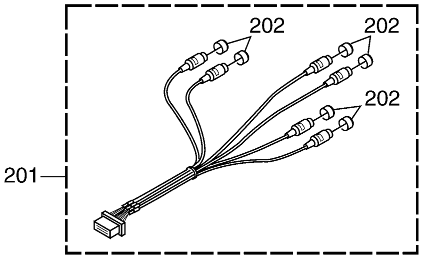
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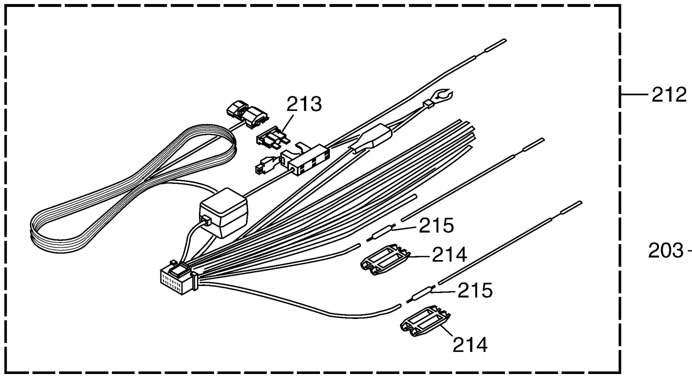
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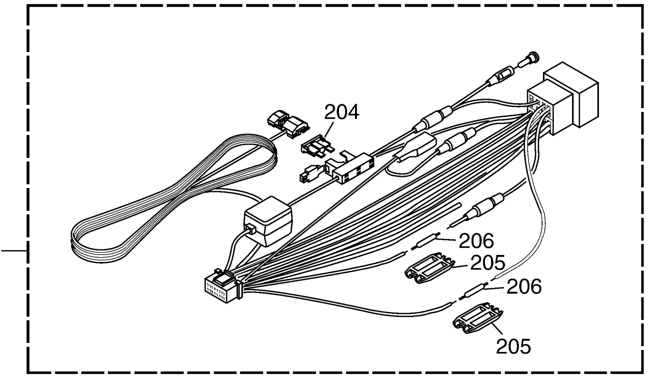
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(1) EXTERIOR(3) SECTION PARTS LIST

Mark	No.	Description	Part No.
	201	Cord Assy	CDE7194
	202	Cap	CNV6727
	203	Cord Assy	See Contrast table(2)
	204	Fuse(10A)	See Contrast table(2)
	205	Cap	See Contrast table(2)
	206	Resistor	See Contrast table(2)
	207	Cord Assy	CDE7321
	208	Cap	CNS1472
	209	Resistor	RS1/2PMF102J
	210	Remote Control Unit	See Contrast table(2)
	211	Cover	CZN5357
	212	Cord Assy	See Contrast table(2)
	213	Fuse(10A)	See Contrast table(2)
	214	Cap	See Contrast table(2)
	215	Resistor	See Contrast table(2)
	216	Screw	BSZ26P060FTC
	217	Screw	BSZ30P060FZK
	218	Cord Assy	CDE7280
	219	Chassis	CNA2615
	220	Case	See Contrast table(2)
	221	Insulator	CNM8124
	222	Tuner Unit	See Contrast table(2)
	223	Screw	BMZ30P050FTC
	224	FM/AM Tuner Unit	See Contrast table(2)
	225	Holder	CND1432
	226	Terminal(CN1412)	CKF-047
	227	Pin Jack(CN1403)	CKS1825
	228	Connector(CN101,CN102)	CKS4653
	229	Pin Jack(CN1401,CN1402)	CKS2918
	230	Connector(CN1404)	CKS4467
	231	Connector(CN1405)	CKS4663
	232	Antenna Jack(CN1406)	CKX1056
	233	Holder	CNC6746
	234	Holder	CNC7205
	235	Holder	CNC9888
	236	Holder	CND1451

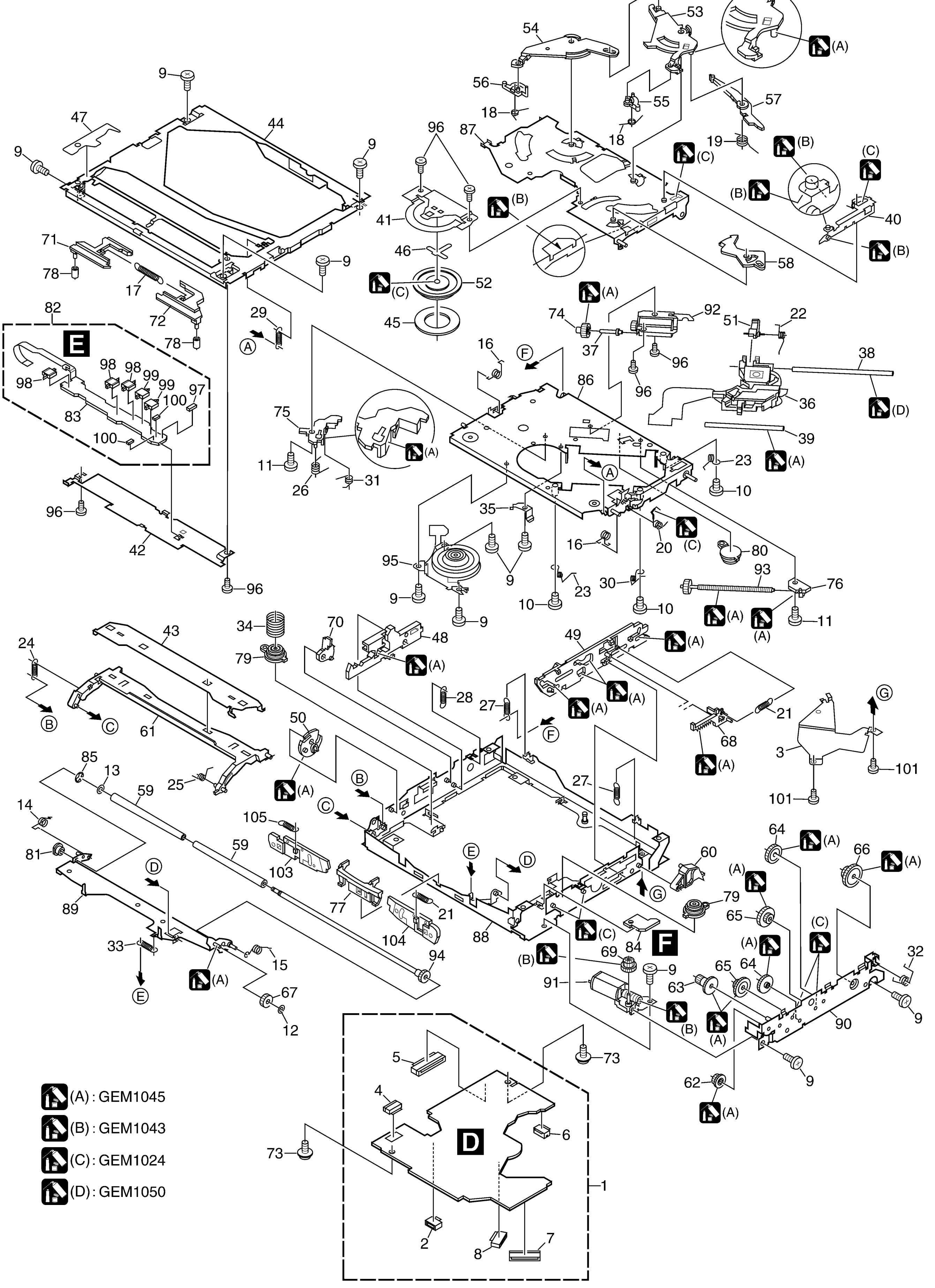
Mark	No.	Description	Part No.
	237	Transistor(Q1404)	2SD2375
	238	Grille Unit	See Contrast table(2)
	239	Touch Panel	CSX1057
	240	Button(ENT,WIDE,MENU)	See Contrast table(2)
	241	Button	CAC7936
	242	Screw	JFZ20P022FNI
	243	FFC	CDE7195
	244	LCD	CAW1805
	245	Holder	CND1468
	246	Lighting Conductor	CNV7564
	247	Sheet	CNM8488
	248	Holder	CND1469
	249	Insulator	CNM8131
	250	FFC	CDE7196
	251	LCD Panel	CWX2671
	252	Insulator	CNM8132
	253	Sheet	CNM7783
	254	Sheet	CNM7784
	255	Holder	CND1467
	256	Screw	BPZ20P060FTC
	257	Monitor Unit	See Contrast table(2)
	258	Connector(CN4461)	CKS3968
	259	Connector(CN4801)	CKS3991
	260	Connector(CN4201)	CKS4054
	261	Connector(CN4301)	CKS4054
	262	Connector(CN4311)	CKS4374
	263	Connector(CN5002)	CKS4428
	264	Connector(CN4701)	CKS4495
	265	Connector(CN4312)	CKS4496
	266	Connector(CN4451)	CKS4595
	267	Connector(CN5001)	CKS4595
	268	Connector(CN4421)	CKS4675
	269	Holder	CND1677
	270	Insulator	CNM7351
	271	Cushion	CNM8440

(2) CONTRAST TABLE

AVX-P6500DVD/UC , AVX-P6500DVD/EW , AVX-P6550DVD/RC and AVX-P6550DVD/RD are constructed the same except for the following:

			Part No.			
Mark	No.	Description	P6500DVD/UC	P6500DVD/EW	P6550DVD/RC	P6550DVD/RD
	203	Cord Assy	Not used	CDE7192	Not used	Not used
	204	Fuse(10A)	Not used	CEK1136	Not used	Not used
	205	Cap	Not used	CNS1472	Not used	Not used
	206	Resistor	Not used	RS1/2PMF102J	Not used	Not used
	210	Remote Control Unit	CXC1224	CXC1226	CXC1226	CXC1226
	212	Cord Assy	CDE7193	Not used	CDE7193	CDE7193
	213	Fuse(10A)	CEK1136	Not used	CEK1136	CEK1136
	214	Cap	CNS1472	Not used	CNS1472	CNS1472
	215	Resistor	RS1/2PMF102J	Not used	RS1/2PMF102J	RS1/2PMF102J
	220	Case	CNB2834	CNB2834	CNB2878	CNB2878
	222	Tuner Unit	CWM8774	CWM8773	CWM8774	CWM8774
	224	FM/AM Tuner Unit	CWE1651	CWE1650	CWE1651	CWE1651
	238	Grille Unit	CXC1095	CXC1094	CXC1101	CXC1101
	240	Button(ENT,WIDE,MENU)	CAC7935	CAC7935	CAC7952	CAC7952
	257	Monitor Unit	CWM8764	CWM8763	CWM8764	CWM8764

2.5 DVD MECHANISM MODULE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(A) : GEM1045

(B) : GEM1043

(C) : GEM1024

(D) : GEM1050

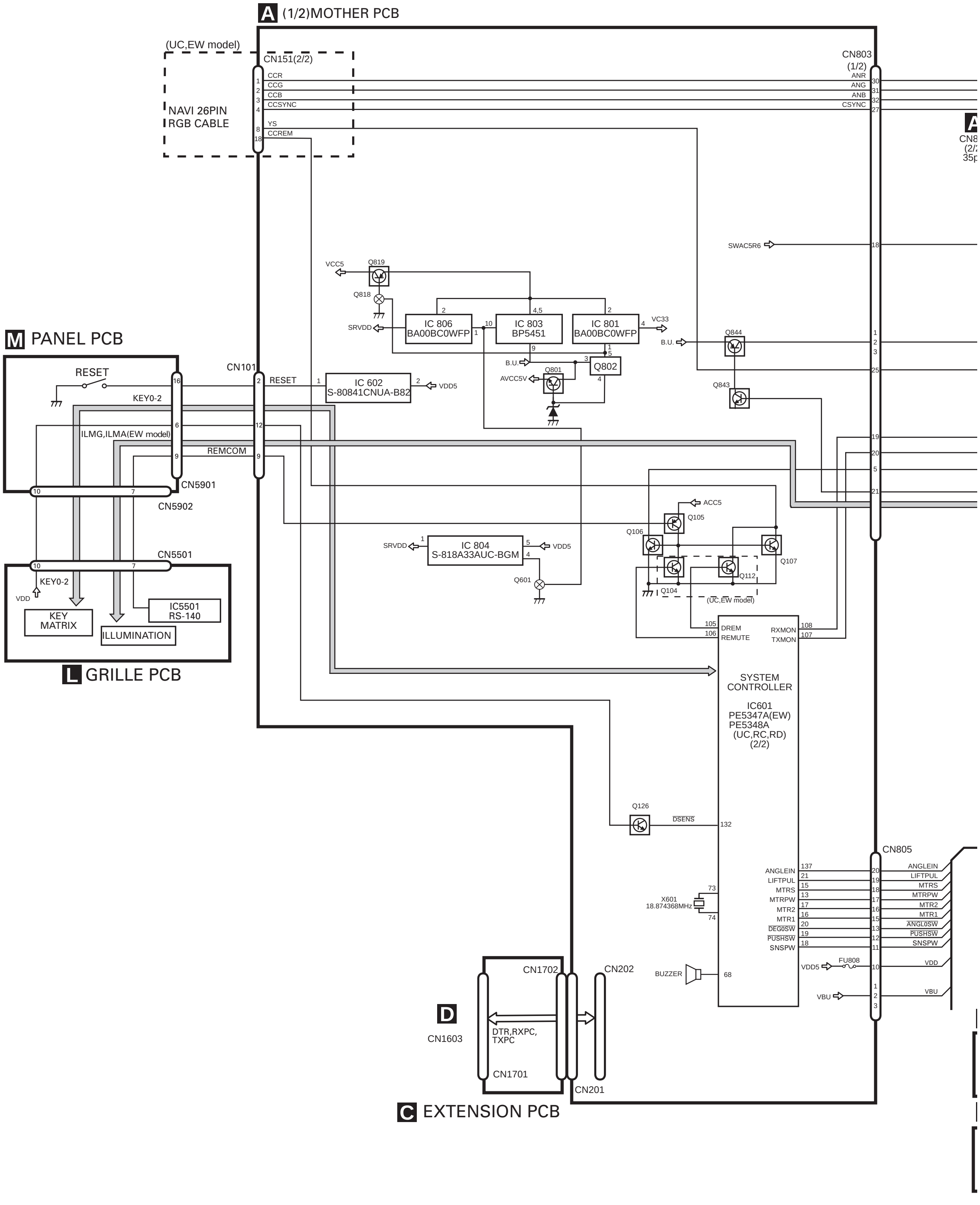
DVD MECHANISM MODULE SECTION PARTS LIST

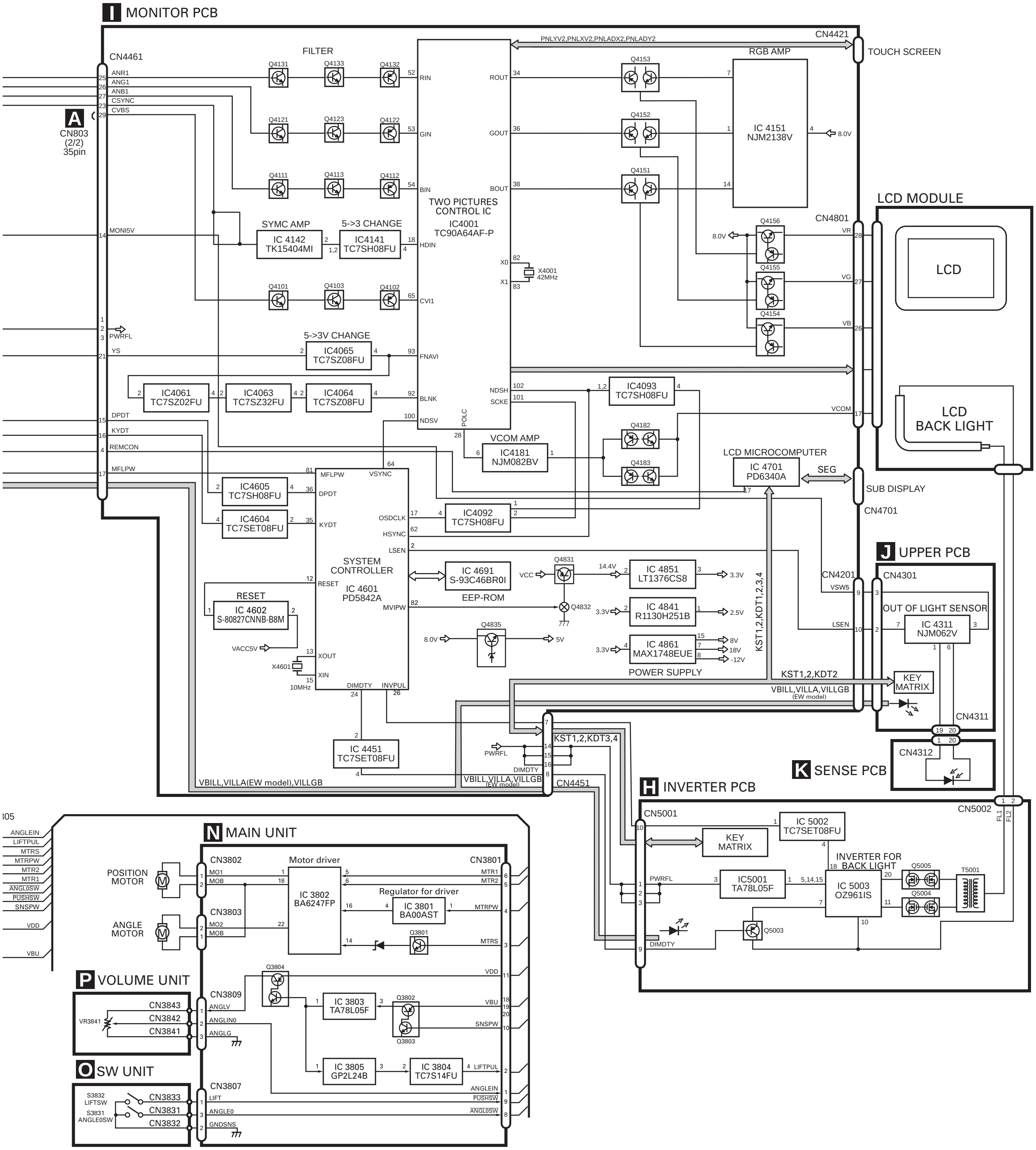
Mark	No.	Description	Part No.
	1	DVD Core Unit(MS3)	CWX2709
	2	Connector(CN1501)	CKS4282
	3	Cover	CNC9943
	4	Connector(CN1202)	CKS4624
	5	Connector(CN1611)	CKS4052
	6	Connector(CN1603)	CKS4374
	7	Connector(CN1101)	CKS4625
	8	Connector(CN1201)	CKS4067
	9	Screw	BMZ20P020FTC
	10	Screw(M2 x 3.5)	CBA1571
	11	Screw(M2 x 2.5)	CBA1623
	12	Washer	CBF1038
	13	Washer	CBF1064
	14	Spring	CBH2586
	15	Spring	CBH2587
	16	Spring	CBH2588
	17	Spring	CBH2589
	18	Spring	CBH2590
	19	Spring	CBH2591
	20	Spring	CBH2592
	21	Spring	CBH2593
	22	Spring	CBH2594
	23	Spring	CBH2595
	24	Spring	CBH2596
	25	Spring	CBH2597
	26	Spring	CBH2598
	27	Spring	CBH2599
	28	Spring	CBH2600
	29	Spring	CBH2601
	30	Spring	CBH2602
	31	Spring	CBH2603
	32	Spring	CBH2604
	33	Spring	CBH2605
	34	Spring	CBH2711
	35	Spring	CBL1564
	36	Pickup Unit(Service)(DP5)	CXX1639
	37	Shaft	CLA3881
	38	Shaft	CLA4206
	39	Shaft	CLA4207
	40	Lever	CNC9933
	41	Holder	CNC9939
	42	Holder	CNC9940
	43	Holder	CNC9941
	44	Frame	CNC9944
	45	Sheet	CNM6883
	46	Sheet	CNM8283
	47	Sheet	CNM8287
	48	Lever	CNV7154
	49	Lever	CNV7155
	50	Cam	CNV7156
	51	Rack	CNV7157
	52	Clamper	CNV7158
	53	Arm	CNV7159
	54	Arm	CNV7160
	55	Arm	CNV7161

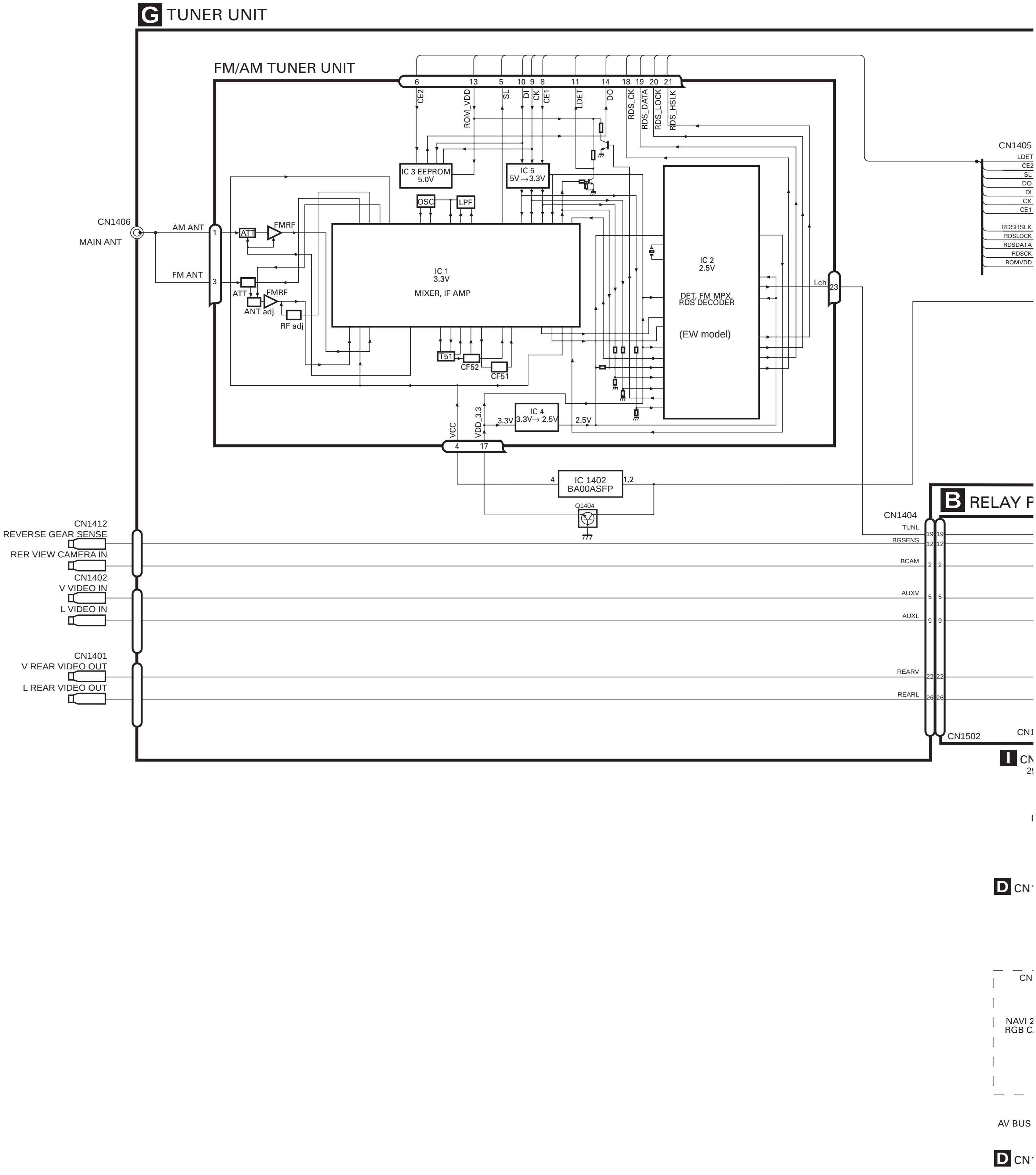
Mark	No.	Description	Part No.
	56	Arm	CNV7162
	57	Arm	CNV7163
	58	Arm	CNV7164
	59	Roller	CNV7165
	60	Arm	CNV7166
	61	Guide	CNV7167
	62	Gear	CNV7169
	63	Gear	CNV7170
	64	Gear	CNV7171
	65	Gear(Brack)	CNV7172
	66	Gear	CNV7173
	67	Gear	CNV7174
	68	Rack	CNV7175
	69	Gear	CNV7176
	70	Arm	CNV7177
	71	Lever	CNV7178
	72	Lever	CNV7179
	73	Screw	IMS20P030FTC
	74	Gear	CNV7181
	75	Holder	CNV7183
	76	Holder	CNV7184
	77	Guide	CNV7745
	78	Roller	CNV7344
	79	Damper	CNV7470
	80	Damper	CNV7471
	81	Coller	CNV7645
	82	Compound Unit (A)	CWX2752
	83	Gathering PCB	CNX3835
	84	Compound Unit (B)	CWX2753
	85	Washer	YE20FTC
	86	Chassis Unit	CXB8680
	87	Arm Unit	CXB8681
	88	Frame Unit	CXB8683
	89	Arm Unit	CXB8684
	90	Bracket Unit	CXB8685
	91	Motor Unit(LOADING)(M1)	CXB8687
	92	Motor Unit(CARRIAGE)(M2)	CXB8688
	93	Screw Unit	CXB8689
	94	Roller Unit	CXB8690
	95	Motor(SPINDLE)(M3)	CXM1211
	96	Screw	JFZ20P018FTC
	97	Photo-transistor(Q1299)	CPT231SCTD
	98	Switch(S1201,S1202,S1203)	CSN1051
	99	Spring Switch(S1204,S1205)	CSN1052
	100	Resistor(R1298,R1299)	RS1/16S0R0J
	101	Screw	JFZ20P018FTC
	102	•••••	
	103	Arm	CNV7742
	104	Arm	CNV7743
	105	Spring	CBH2710

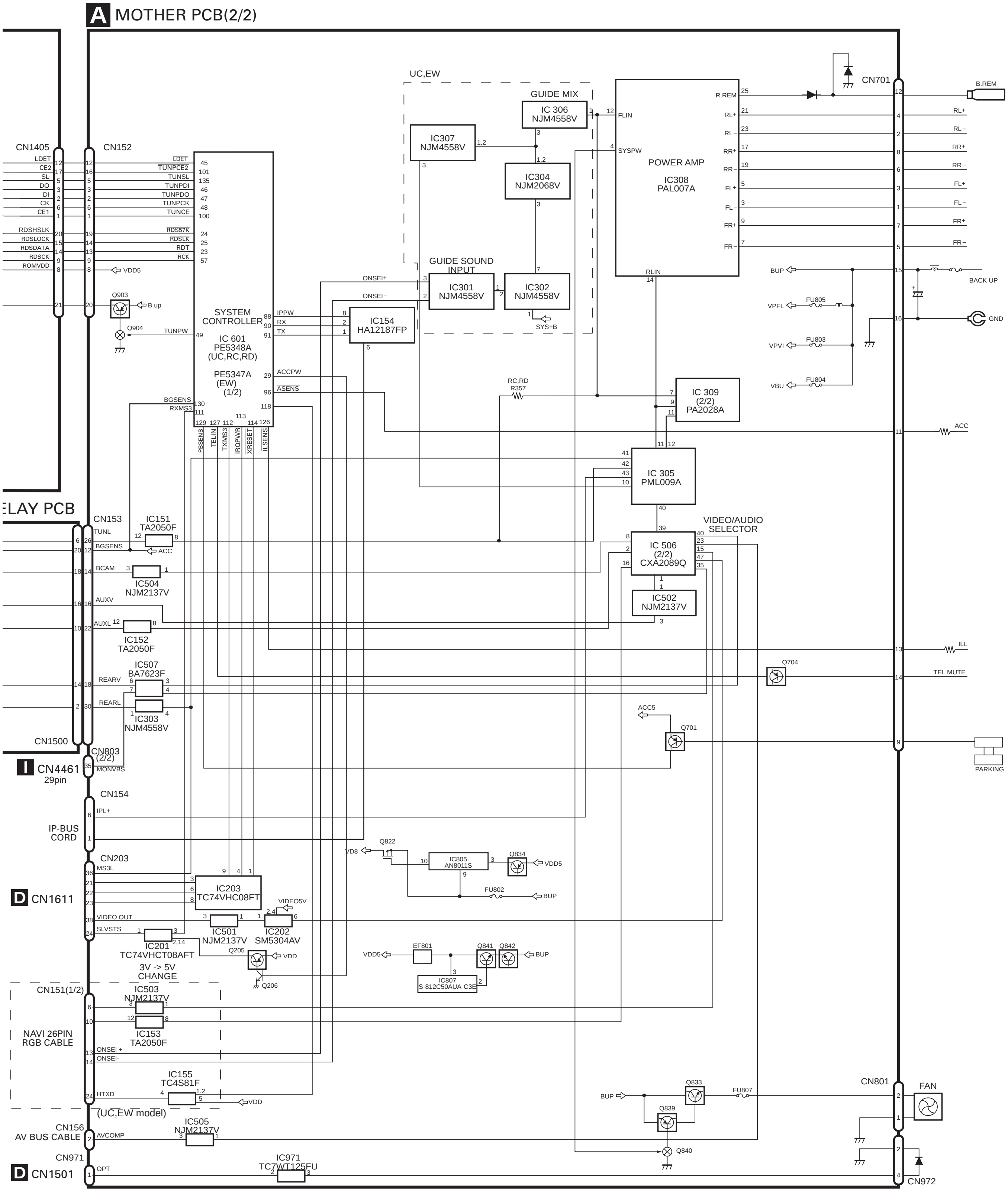
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

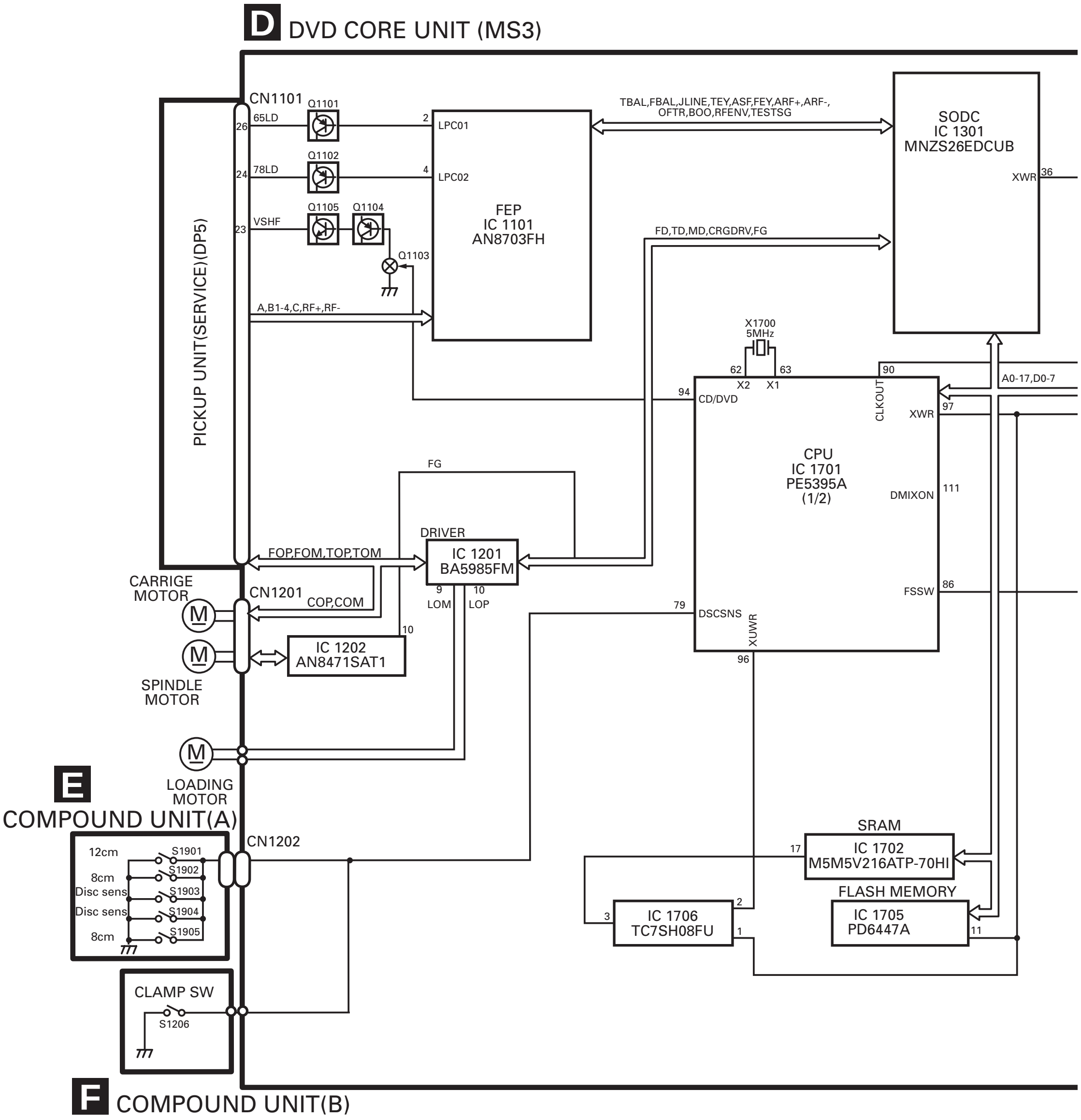
3.1 BLOCK DIAGRAM

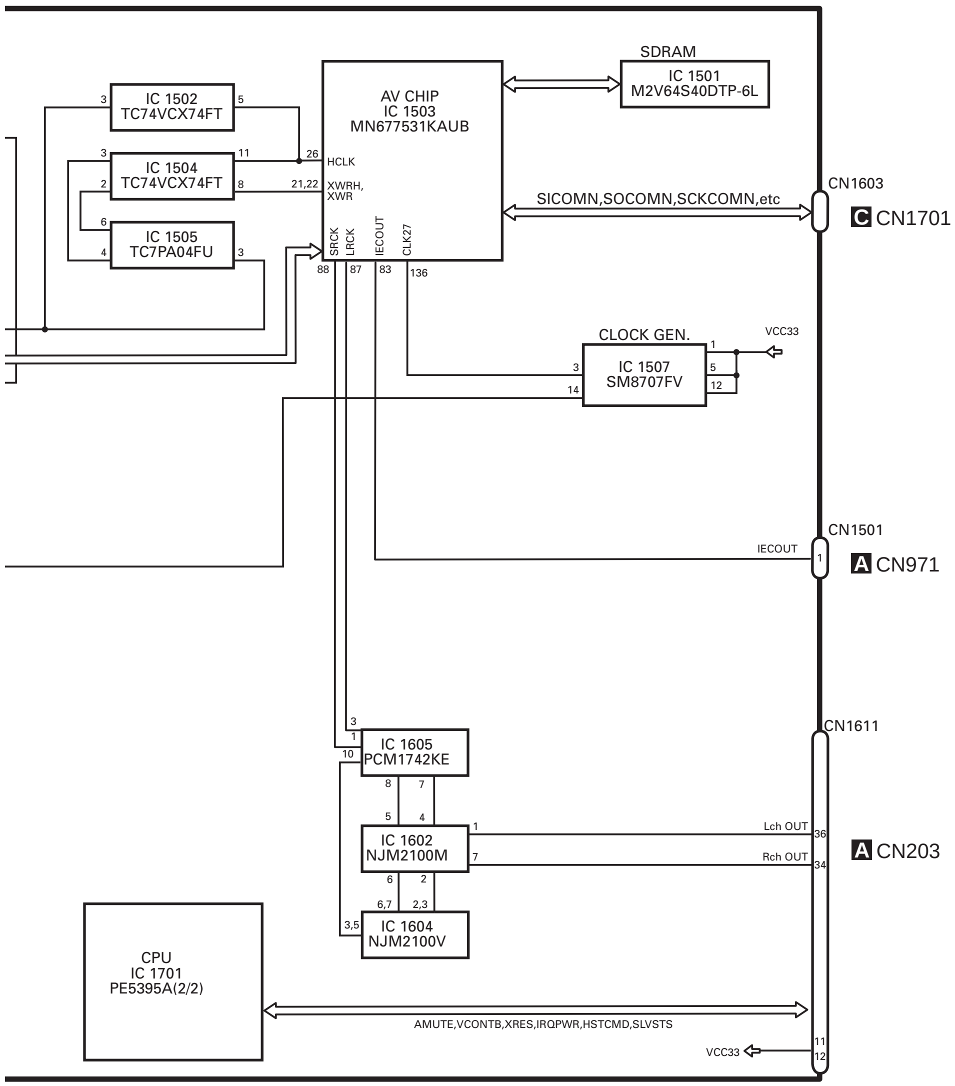

A (1/2)MOTHER PCB
(UC,EW model)
CN151(2/2)
NAVI 26PIN
RGB CABLE
CCR
CCG
CCB
CCSYNC
YS
CCREM
CN803
(1/2)
ANR
ANG
ANB
CSYNC
A
CN8
(2/2
35p
SWAC5R6
VCC5
Q819
Q818
SRVDD
IC 806
BA00BC0WFP
IC 803
BP5451
IC 801
BA00BC0WFP
VC33
B.U.
Q844
Q843
Q801
AVCC5V
Q802
M PANEL PCB
RESET
KEY0-2
ILMG,ILMA(EW model)
REMCOM
CN101
RESET
IC 602
S-80841CNUA-B82
VDD5
CN5901
CN5902
CN5501
KEY0-2
VDD
KEY MATRIX
ILLUMINATION
IC5501
RS-140
L GRILLE PCB
ACC5
Q105
Q106
Q107
Q104
Q112
(UC,EW model)
IC 804
S-818A33AUC-BGM
Q601
DREM
REMUTE
RXMON
TXMON
SYSTEM CONTROLLER
IC601
PE5347A(EW)
PE5348A
(UC,RC,RD)
(2/2)
Q126
DSENS
X601
18.874368MHz
BUZZER
ANGLEIN
LIFTPUL
MTRS
MTRPW
MTR2
MTR1
DEG0SW
PUSHSW
SNSPW
VDD5
FU808
VDD
VBU
CN805
CN1702
CN202
D
CN1603
DTR,RXPC,
TXPC
CN1701
CN201
C EXTENSION PCB


I MONITOR PCB
CN4461
A
CN803
(2/2)
35pin
ANR1
ANG1
ANB1
CSYNC
CVBS
MONI5V
PWRFL
YS
DPDT
KYDT
REMCON
MFLPW
FILTER
Q4131
Q4133
Q4132
Q4121
Q4123
Q4122
Q4111
Q4113
Q4112
Q4101
Q4103
Q4102
SYMC AMP
IC 4142
TK15404MI
5->3 CHANGE
IC4141
TC7SH08FU
5->3V CHANGE
IC4065
TC7SZ08FU
IC4061
TC7SZ02FU
IC4063
TC7SZ32FU
IC4064
TC7SZ08FU
TWO PICTURES
CONTROL IC
IC4001
TC90A64AF-P
RIN
GIN
BIN
HDIN
CVI1
FNAVI
BLNK
NDSV
POLC
ROUT
GOUT
BOUT
X0
X1
NDSH
SCKE
X4001
42MHz
PNLYV2,PNLXV2,PNLADX2,PNLADY2
CN4421
TOUCH SCREEN
RGB AMP
Q4153
Q4152
Q4151
IC 4151
NJM2138V
8.0V
Q4156
Q4155
Q4154
CN4801
VR
VG
VB
VCOM
LCD MODULE
LCD
LCD
BACK LIGHT
IC4093
TC7SH08FU
VCOM AMP
IC4181
NJM082BV
Q4182
Q4183
LCD MICROCOMPUTER
IC 4701
PD6340A
SEG
SUB DISPLAY
CN4701
IC4605
TC7SH08FU
IC4604
TC7SET08FU
SYSTEM
CONTROLLER
IC 4601
PD5842A
MFLPW
VSYNC
DPDT
KYDT
OSDCLK
HSYNC
LSEN
RESET
MVIPW
XOUT
XIN
DIMDTY
INVPUL
IC4092
TC7SH08FU
IC 4691
S-93C46BR0I
EEP-ROM
RESET
IC 4602
S-80827CNNB-B8M
VACC5V
X4601
10MHz
VCC
Q4831
Q4832
Q4835
8.0V
5V
14.4V
IC 4851
LT1376CS8
3.3V
IC 4841
R1130H251B
2.5V
IC 4861
MAX1748EUE
8V
18V
-12V
POWER SUPPLY
KST1,2,KDT1,2,3,4
KST1,2,KDT2
VBILL,VILLA,VILLGB
(EW model)
CN4201
VSW5
LSEN
J UPPER PCB
CN4301
OUT OF LIGHT SENSOR
IC 4311
NJM062V
KEY
MATRIX
CN4311
CN4312
K SENSE PCB
IC 4451
TC7SET08FU
PWRFL
DIMDTY
KST1,2,KDT3,4
VBILL,VILLA,VILLGB
(EW model)
VBILL,VILLA(EW model),VILLGB
CN4451
H INVERTER PCB
CN5001
CN5002
IC 5002
TC7SET08FU
KEY
MATRIX
INVERTER FOR
BACK LIGHT
IC 5003
OZ961IS
PWRFL
IC5001
TA78L05F
Q5005
Q5004
T5001
Q5003
DIMDTY
FL1
FL2
305
ANGLEIN
LIFTPUL
MTRS
MTRPW
MTR2
MTR1
ANGL0SW
PUSHSW
SNSPW
VDD
VBU
N MAIN UNIT
CN3802
Motor driver
CN3801
POSITION
MOTOR
MO1
MOB
IC 3802
BA6247FP
CN3803
ANGLE
MOTOR
MO2
MOB
Regulator for driver
IC 3801
BA00AST
MTRPW
Q3801
MTRS
VDD
Q3804
CN3809
ANGLV
ANGLIN0
ANGLG
IC 3803
TA78L05F
Q3802
Q3803
VBU
SNSPW
IC 3805
GP2L24B
IC 3804
TC7S14FU
LIFTPUL
ANGLEIN
PUSHSW
ANGL0SW
CN3807
LIFT
ANGLE0
GNDSNS
P VOLUME UNIT
CN3843
CN3842
CN3841
VR3841
O SW UNIT
S3832
LIFTSW
S3831
ANGLE0SW
CN3833
CN3831
CN3832


G TUNER UNIT
FM/AM TUNER UNIT
6 13 5 10 9 8 11 14 18 19 20 21
CE2
ROM_VDD
SL
DI
CK
CE1
LDET
DO
RDS_CK
RDS_DATA
RDS_LOCK
RDS_HSLK
IC 3 EEPROM
5.0V
IC 5
5V → 3.3V
OSC
LPF
CN1406
MAIN ANT
AM ANT
FM ANT
1
3
ATT
FMRF
ATT
FMRF
ANT adj
RF adj
IC 1
3.3V
MIXER, IF AMP
IC 2
2.5V
DET, FM MPX,
RDS DECODER
(EW model)
Lch
23
T51
CF52
CF51
IC 4
3.3V → 2.5V
3.3V
2.5V
VCC
VDD_3.3
4 17
IC 1402
BA00ASFP
4
1,2
Q1404
CN1405
LDET
CE2
SL
DO
DI
CK
CE1
RDSHSLK
RDSLOCK
RDSDATA
RDSCK
ROMVDD
CN1412
REVERSE GEAR SENSE
RER VIEW CAMERA IN
CN1402
V VIDEO IN
L VIDEO IN
CN1401
V REAR VIDEO OUT
L REAR VIDEO OUT
CN1404
TUNL
BGSENS
BCAM
AUXV
AUXL
REARV
REARL
19 19
12 12
2 2
5 5
9 9
22 22
26 26
CN1502
B RELAY P
CN1
I CN
29
D CN1
CN
NAVI 2
RGB C
AV BUS
D CN1


A MOTHER PCB(2/2)
CN1405
LDET
CE2
SL
DO
DI
CK
CE1
RDSHSLK
RDSLOCK
RDSDATA
RDSCK
ROMVDD
CN152
LDET
TUNPCE2
TUNSL
TUNPDI
TUNPDO
TUNPCK
TUNCE
RDS57K
RDSLK
RDT
RCK
VDD5
Q903
B.up
Q904
TUNPW
SYSTEM CONTROLLER
IC 601
PE5348A
(UC,RC,RD)
PE5347A
(EW)
(1/2)
BGSENS
RXMS3
PBSENS
TELIN
TXMS3
IROPWR
XRESET
ILSENS
IPPW
RX
TX
ACCPW
ASENS
IC154
HA12187FP
UC,EW
GUIDE MIX
IC 306
NJM4558V
IC307
NJM4558V
IC304
NJM2068V
GUIDE SOUND INPUT
IC301
NJM4558V
IC302
NJM4558V
SYS+B
ONSEI+
ONSEI−
POWER AMP
IC308
PAL007A
FLIN
SYSPW
RLIN
R.REM
RL+
RL−
RR+
RR−
FL+
FL−
FR+
FR−
CN701
B.REM
BUP
BACK UP
VPFL
FU805
VPVI
FU803
VBU
FU804
GND
RC,RD
R357
IC 309
(2/2)
PA2028A
ACC
IC 305
PML009A
VIDEO/AUDIO SELECTOR
IC 506
(2/2)
CXA2089Q
IC502
NJM2137V
ELAY PCB
CN153
TUNL
BGSENS
BCAM
AUXV
AUXL
REARV
REARL
IC151
TA2050F
ACC
IC504
NJM2137V
IC152
TA2050F
IC507
BA7623F
IC303
NJM4558V
CN1500
CN803
(2/2)
MONVBS
I CN4461
29pin
ILL
Q704
TEL MUTE
ACC5
Q701
PARKING
CN154
IPL+
IP-BUS CORD
CN203
MS3L
D CN1611
VIDEO OUT
SLVSTS
IC203
TC74VHC08FT
IC501
NJM2137V
IC202
SM5304AV
VIDEO5V
IC201
TC74VHCT08AFT
Q205
VDD
Q206
3V -> 5V CHANGE
VD8
Q822
IC805
AN8011S
Q834
VDD5
FU802
BUP
VDD5
EF801
Q841
Q842
BUP
IC807
S-812C50AUA-C3E
CN151(1/2)
IC503
NJM2137V
IC153
TA2050F
NAVI 26PIN RGB CABLE
ONSEI +
ONSEI-
HTXD
IC155
TC4S81F
VDD
(UC,EW model)
CN156
AV BUS CABLE
AVCOMP
IC505
NJM2137V
CN971
D CN1501
OPT
IC971
TC7WT125FU
BUP
Q833
FU807
Q839
Q840
CN801
FAN
CN972


D
DVD CORE UNIT (MS3)
PICKUP UNIT(SERVICE)(DP5)
CN1101
26
65LD
24
78LD
23
VSHF
Q1101
Q1102
Q1105
Q1104
Q1103
A,B1-4,C,RF+,RF-
2
LPC01
4
LPC02
FEP
IC 1101
AN8703FH
TBAL,FBAL,JLINE,TEY,ASF,FEY,ARF+,ARF-,
OFTR,BOO,RFENV,TESTSG
FD,TD,MD,CRGDRV,FG
SODC
IC 1301
MNZS26EDCUB
XWR
36
X1700
5MHz
62
63
X2
X1
90
A0-17,D0-7
94
CD/DVD
CLKOUT
XWR
97
CPU
IC 1701
PE5395A
(1/2)
DMIXON
111
FSSW
86
79
DSCSNS
XUWR
96
FG
DRIVER
IC 1201
BA5985FM
FOP,FOM,TOP,TOM
COP,COM
9
LOM
10
LOP
10
IC 1202
AN8471SAT1
CARRIGE
MOTOR
CN1201
M
M
SPINDLE
MOTOR
M
LOADING
MOTOR
E
COMPOUND UNIT(A)
CN1202
12cm
S1901
8cm
S1902
Disc sens
S1903
Disc sens
S1904
8cm
S1905
CLAMP SW
S1206
F
COMPOUND UNIT(B)
SRAM
17
IC 1702
M5M5V216ATP-70HI
FLASH MEMORY
IC 1705
PD6447A
11
3
IC 1706
TC7SH08FU
2
1


IC 1502
TC74VCX74FT
3
5
IC 1504
TC74VCX74FT
3
2
11
8
IC 1505
TC7PA04FU
6
4
3
AV CHIP
IC 1503
MN677531KAUB
26
HCLK
21,22
XWRH,
XWR
SRCK
LRCK
IECOUT
CLK27
88
87
83
136
SDRAM
IC 1501
M2V64S40DTP-6L
SICOMN,SOCOMN,SCKCOMN,etc
CN1603
C CN1701
CLOCK GEN.
IC 1507
SM8707FV
3
14
1
5
12
VCC33
CN1501
IECOUT
1
A CN971
CN1611
IC 1605
PCM1742KE
3
1
10
8
7
5
4
IC 1602
NJM2100M
1
7
6
2
Lch OUT
Rch OUT
36
34
A CN203
6,7
2,3
3,5
IC 1604
NJM2100V
CPU
IC 1701
PE5395A(2/2)
AMUTE,VCONTB,XRES,IRQPWR,HSTCMD,SLVSTS
VCC33
11
12

A

B

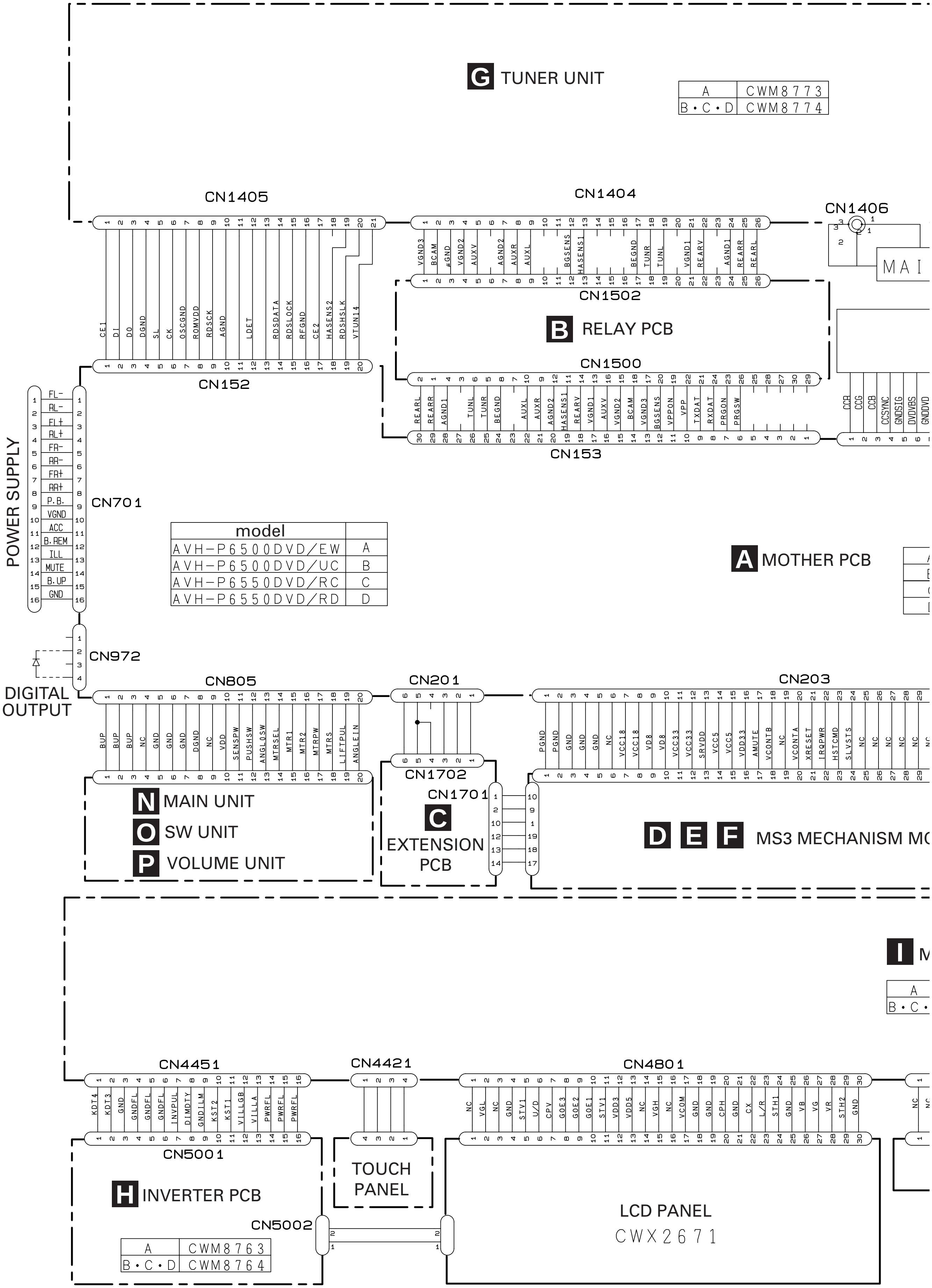
C

D

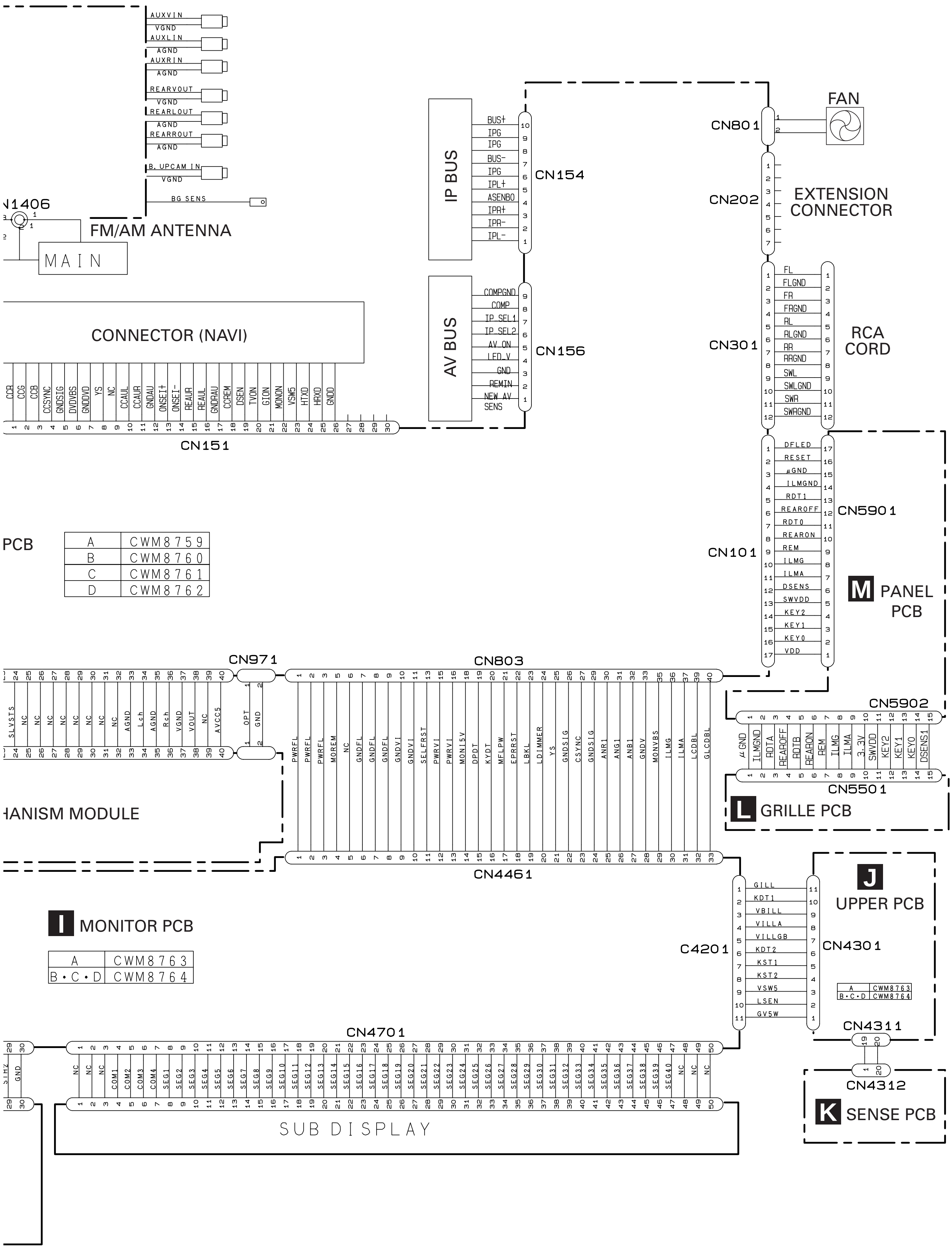
E

F

3.2 OVERALL CONNECTION DIAGRAM


G TUNER UNIT
A CWM8773
B・C・D CWM8774
CN1405
CN1404
CN1406
MAI
CE1 DI DO DGND SL CK OSCGND ROMVDD RDSCK AGND LDET RDSDATA RDSLOCK RFGND CE2 HASENS2 RDSHSLK VTUN14
VGND3 BCAM #GND VGND2 AUXV AGND2 AUXR AUXL BGSENS HASENS1 BEGND TUNR TUNL VGND1 REARV AGND1 REARR REARL
CN1502
B RELAY PCB
CN1500
CN152
CN153
REARL REARR AGND1 TUNL TUNR BEGND AUXL AUXR AGND2 HASENS1 REARV VGND1 AUXV VGND2 BCAM VGND3 BGSENS VPPON VPP TXDAT RXDAT PRGON PRGSW
CCB CCG CCB CCSYNC GNDSIG DVDVBS GNDDVD
POWER SUPPLY
FL- RL- FL+ RL+ FR- RR- FR+ RR+ P.B. VGND ACC B.REM ILL MUTE B.UP GND
CN701
A MOTHER PCB
CN972
DIGITAL OUTPUT
CN805
BUP BUP BUP NC GND GND DGND NC VDD SENSPW PUSHSW ANGLOSW MTRSEL MTR1 MTR2 MTRPW MTRS LIFTPUL ANGLEIN
CN201
CN1702
CN1701
C EXTENSION PCB
CN203
PGND PGND GND GND NC VCC18 VCC18 VD8 VCC33 VCC33 SRVDD VCC5 VDD33 AMUTE VCONTB NC VCONTA XRESET IRQPWR HSTCMD SLVSTS NC NC NC NC
N MAIN UNIT
O SW UNIT
P VOLUME UNIT
D E F MS3 MECHANISM MO
I M
A
B・C・
CN4451
KDT4 KDT3 GND GNDFL GNDFL INVPUL DIMDTY GNDILM KST2 KST1 VILLGB VILLA PWRFL PWRFL PWRFL
CN4421
CN4801
NC VGL NC GND STV1 U/D CPV GOE3 GOE2 GOE1 STV1 VDD3 VDD5 NC VGH NC VCOM GND GND CPH GND CX L/R STH1 GND VB VG VR STH2 GND
NC
CN5001
H INVERTER PCB
A CWM8763
B・C・D CWM8764
CN5002
TOUCH PANEL
LCD PANEL
CWX2671

model	
AVH-P6500DVD/EW	A
AVH-P6500DVD/UC	B
AVH-P6550DVD/RC	C
AVH-P6550DVD/RD	D


AUXVIN
VGND
AUXLIN
AGND
AUXRIN
AGND
REARVOUT
VGND
REARLOUT
AGND
REARROUT
AGND
B.UPCAM IN
VGND
BG SENS
N1406
FM/AM ANTENNA
MAIN
IP BUS
BUS+
IPG
IPG
BUS-
IPG
IPL+
ASENBO
IPR+
IPR-
IPL-
CN154
AV BUS
COMPGND
COMP
IP SEL1
IP SEL2
AV ON
LED V
GND
REMIN
NEW AV SENS
CN156
CONNECTOR (NAVI)
CCR
CCG
CCB
CCSYNC
GNDSIG
DVDVBS
GNDDVD
YS
NC
CCAUL
CCAUR
GNDAU
ONSEI+
ONSEI-
REAUR
REAUL
GNDRAU
CCREM
DSEN
TVON
GION
MONON
VSW5
HTXD
HRXD
GNDD
CN151
FAN
CN801
CN202
EXTENSION CONNECTOR
CN301
RCA CORD
FL
FLGND
FR
FRGND
RL
RLGND
RR
RRGND
SWL
SWLGND
SWR
SWRGND
CN101
CN5901
DFLED
RESET
μGND
ILMGND
RDT1
REAROFF
RDT0
REARON
REM
ILMG
ILMA
DSENS
SWVDD
KEY2
KEY1
KEY0
VDD
M PANEL PCB
PCB
CN971
CN803
SLVSTS
NC
AGND
Lch
AGND
Rch
VGND
VOUT
NC
AVCC5
OPT
GND
PWRFL
PWRFL
PWRFL
MOREM
NC
GNDFL
GNDFL
GNDFL
GNDVI
GNDVI
SELFRST
PWRVI
PWRVI
MONI5V
DPDT
KYDT
MFLPW
EPRRST
LBKL
LDIMMER
YS
GNDSIG
CSYNC
GNDSIG
ANR1
ANG1
ANB1
GNDV
MONVBS
ILMG
ILMA
LCDBL
GLCDBL
CN5902
μGND
ILMGND
RDTA
REAROFF
RDTB
REARON
REM
ILMG
ILMA
3.3V
SWVDD
KEY2
KEY1
KEY0
DSENS1
CN5501
L GRILLE PCB
HANISM MODULE
CN4461
I MONITOR PCB
C4201
CN4301
J UPPER PCB
GILL
KDT1
VBILL
VILLA
VILLGB
KDT2
KST1
KST2
VSW5
LSEN
GV5W
CN4311
CN4312
K SENSE PCB
CN4701
NC
COM1
COM2
COM3
COM4
SEG1 … SEG40
GND
SUB DISPLAY

PCB

A	CWM8759
B	CWM8760
C	CWM8761
D	CWM8762

I MONITOR PCB

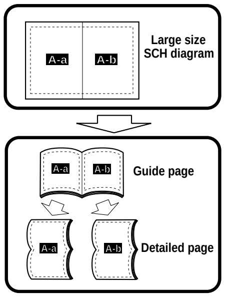
A	CWM8763
B・C・D	CWM8764

J UPPER PCB

A	CWM8763
B・C・D	CWM8764

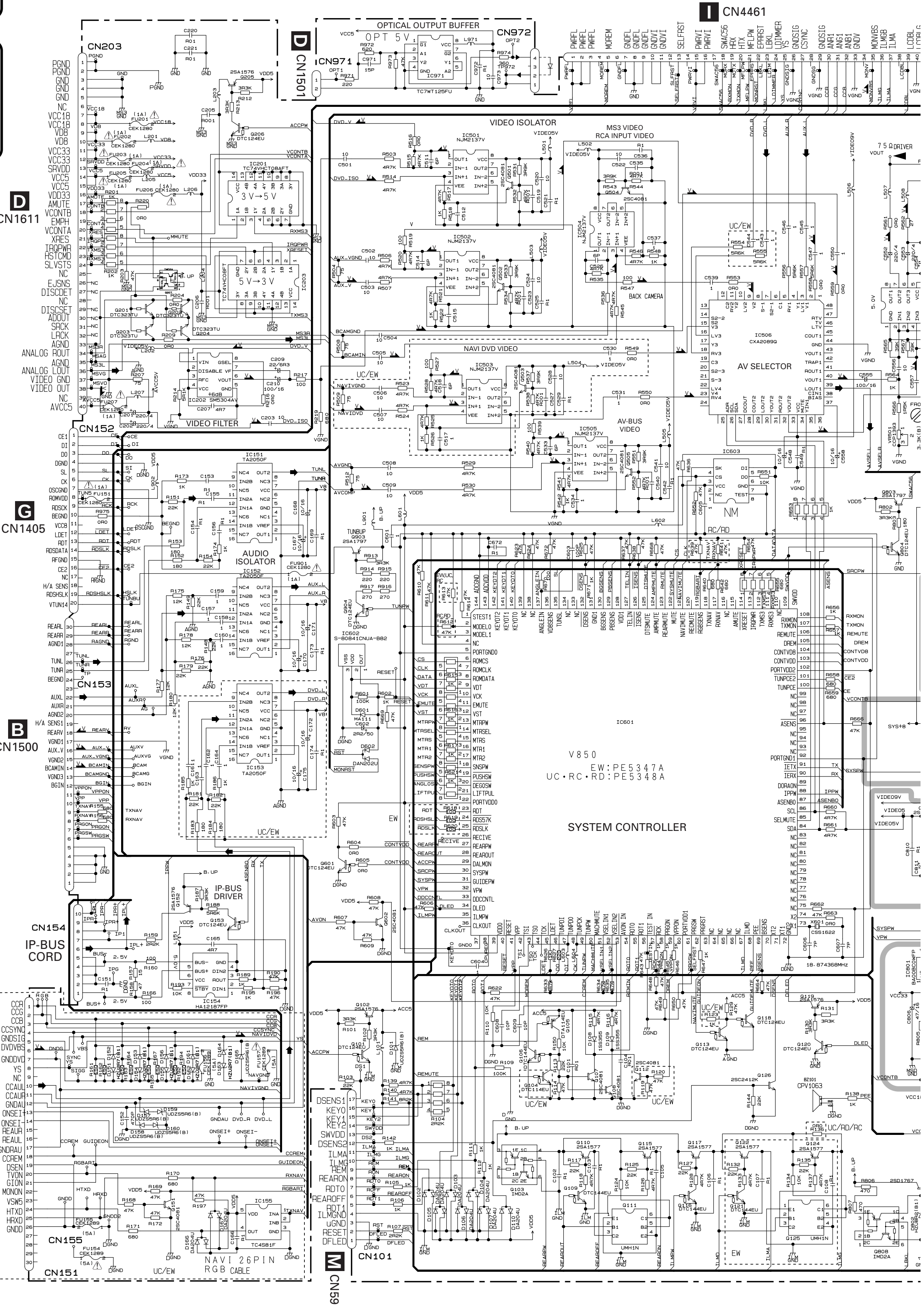
3.3 MOTHER PCB(GUIDE PAGE)

Note: When ordering service parts, be sure to refer to " EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".



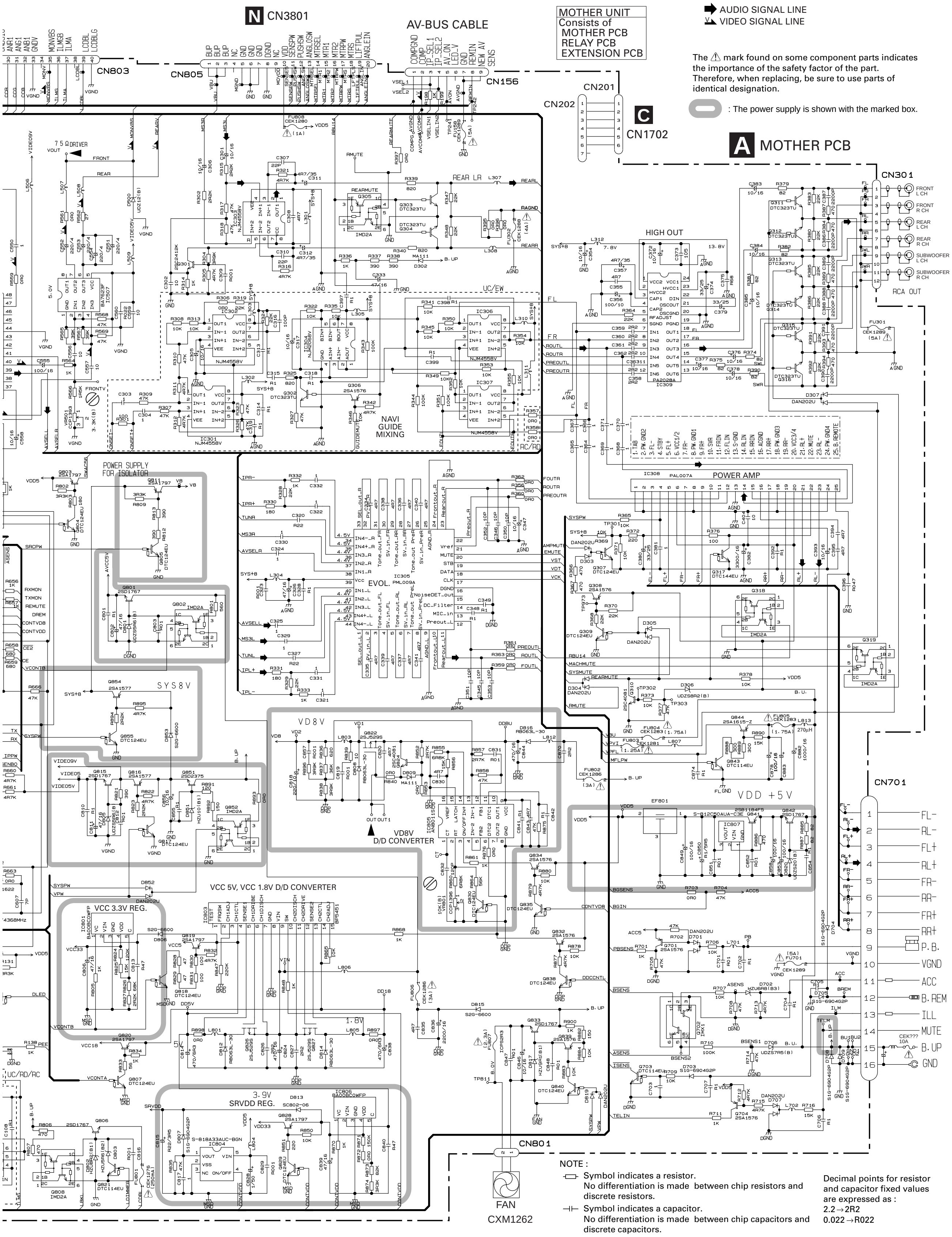
A-a
A-b
Large size SCH diagram
A-a
A-b
Guide page
A-a
A-b
Detailed page

A-a



I CN4461
D CN1501
CN971
OPTICAL OUTPUT BUFFER
OPT 5V
CN972
IC971 TC7WT125FU
CN203
PGND
GND
NC
VCC18
VDB
VCC33
SRVDD
VCC5
VDD33
AMUTE
VCONTB
EMPH
VCONTA
XRES
IRQPWR
HSTCMD
SLVSTS
EJSNS
DISCDET
DISCSET
ADOUT
SRCK
LRCK
AGND
ANALOG ROUT
ANALOG LOUT
VIDEO GND
VIDEO OUT
AVCC5
D CN1611
IC201 TC74VHCT08AFT
3V→5V
IC203 TC74VHC08FT
5V→3V
IC202 SM5304AV
VIDEO FILTER
2SA1576 Q205
DTC124EU Q206
DTC323TU Q201
DTC323TU Q203
Q204
VIDEO ISOLATOR
IC501 NJM2137V
IC502 NJM2137V
IC503 NJM2137V
NAVI DVD VIDEO
MS3 VIDEO RCA INPUT VIDEO
IC504 NJM2137V
BACK CAMERA
UC/EW
AV SELECTOR
IC506 CXA2089Q
AV-BUS VIDEO
IC505 NJM2137V
IC603
NM
75Ω DRIVER
CN152
G CN1405
CE1
DI
DO
DGND
SL
CK
OSCGND
ROMVDD
RDSCK
BEGND
VCCB
LDET
RDT
RDSDATA
RFGND
CE2
H/A SENS
RDSHSLK
VTUN14
IC151 TA2050F
AUDIO ISOLATOR
IC152 TA2050F
IC153 TA2050F
UC/EW
REARL
REARR
AGND1
TUNL
TUNR
BEGND
CN153
AUXL
AUXR
AGND2
H/A SENS1
REARV
VGND1
AUX_V
VGND2
BCAMIN
VGND3
BGIN
B CN1500
IC602 S-80841CNJA-B82
IC601
V850
EW:PE5347A
UC・RC・RD:PE5348A
SYSTEM CONTROLLER
EW
IP-BUS DRIVER
CN154
IP-BUS CORD
IC154 HA12187FP
2SA1576 Q152
DTC124EU Q153
DTC124EU Q601
CN151
CCR
CCG
CCB
CCSYNC
GNDSIG
DVDVBS
GNDDVD
YS
NC
CCAUL
CCAUR
GNDAU
ONSEI+
ONSEI-
REAUR
REAUL
GNDRAU
CCREM
DSEN
TVON
GION
MONON
VSW5
HTXD
HRXD
GNDD
NAVI 26PIN RGB CABLE
CN155
IC155 TC4S81F
NAVI 26PIN RGB CABLE
UC/EW
M CN5901
CN101
DSENS1
KEY0
KEY1
KEY2
SWVDD
DSENS2
ILMA
ILMC
REM
REARON
RDTO
REAROFF
RDT1
ILMGND
uGND
RESET
DFLED
UC/EW
UC/EW
BZ101 CPV1063
UC/RD/RC
X601 CSS1622
18.874368MHz
Q102 2SA1576
Q110 2SA1577
Q115 2SA1577
Q117 2SA1577
Q122 2SA1577
Q124 2SA1576
Q111 UMH1N
Q125 UMH1N
Q103 IMD2A
Q808 IMD2A
Q118 DTC124EU
Q113 DTC124EU
Q120 DTC124EU
Q126 2SC2412K
EW

A-b


N CN3801
AV-BUS CABLE
CN803
CN805
CN156
CN201
CN202
C CN1702
CN301
RCA OUT
FRONT L CH
FRONT R CH
REAR L CH
REAR R CH
SUBWOOFER L CH
SUBWOOFER R CH
HIGH OUT
PA2028A IC309
UC/EW
NAVI GUIDE MIXING
POWER SUPPLY FOR ISOLATOR
SYS8V
VD8V
VD8V D/D CONVERTER
EVOL.
IC305 PML009A
IC308 PAL007A
POWER AMP
VDD +5V
VCC 5V, VCC 1.8V D/D CONVERTER
VCC 3.3V REG.
3.9V SRVDD REG.
CN701
FL-
RL-
FL+
RL+
FR-
RR-
FR+
RR+
P.B.
VGND
ACC
B.REM
ILL
MUTE
B.UP
GND
CN801
FAN
CXM1262
IC301 NJM4558V
IC302 NJM4558V
IC303 NJM4558V
IC306 NJM4558V
IC307 NJM4558V
IC304 NJM2088V
IC507 BA7623F
75Ω DRIVER
REAR LR
1.8V
VD8
EF801
IC807
IC801 BA00BC0WFP
IC803
IC804
IC806 BA00BC0WFP
IC805

MOTHER UNIT
Consists of
MOTHER PCB
RELAY PCB
EXTENSION PCB

AUDIO SIGNAL LINE
V VIDEO SIGNAL LINE

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

: The power supply is shown with the marked box.

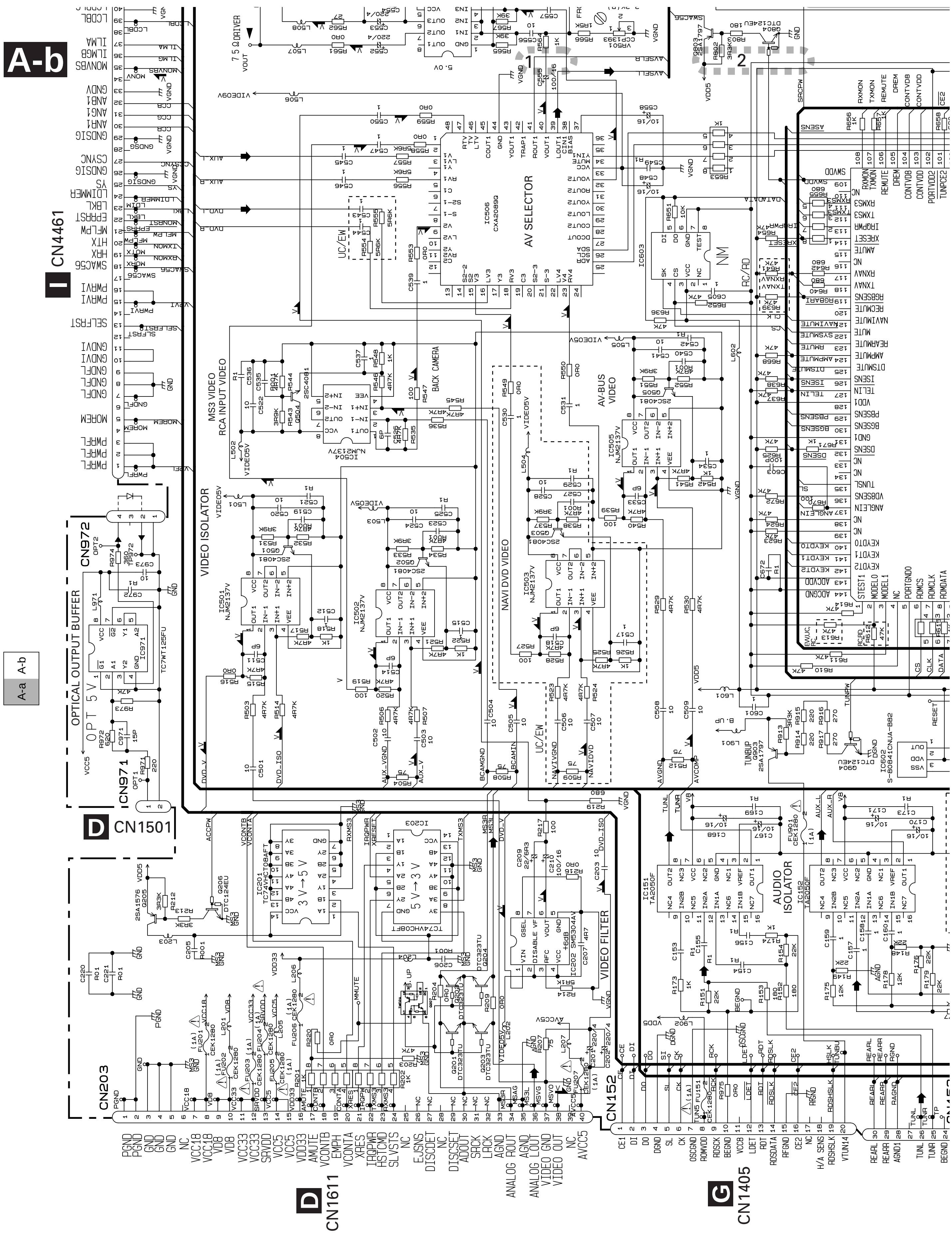
A MOTHER PCB

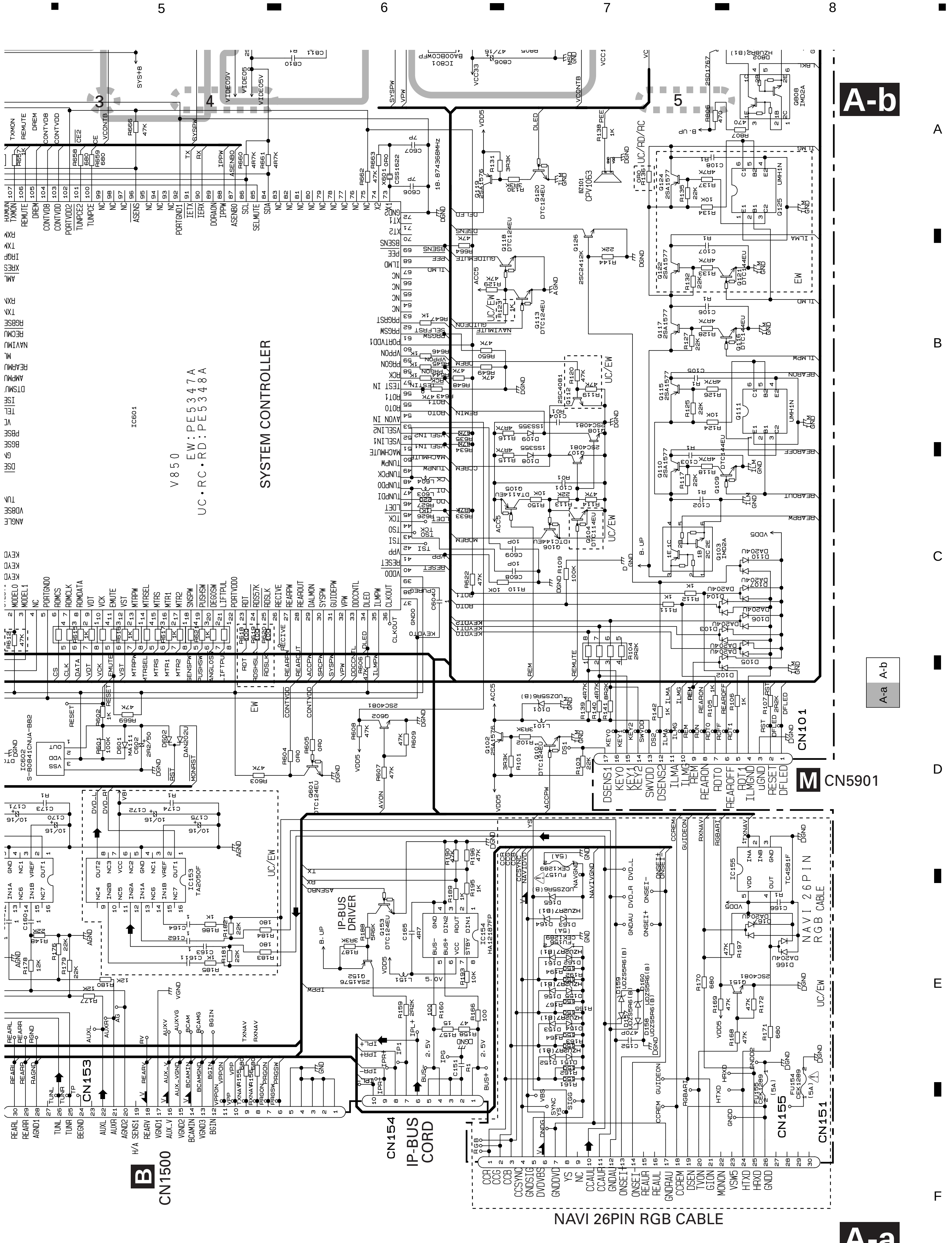
NOTE :

▭ Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

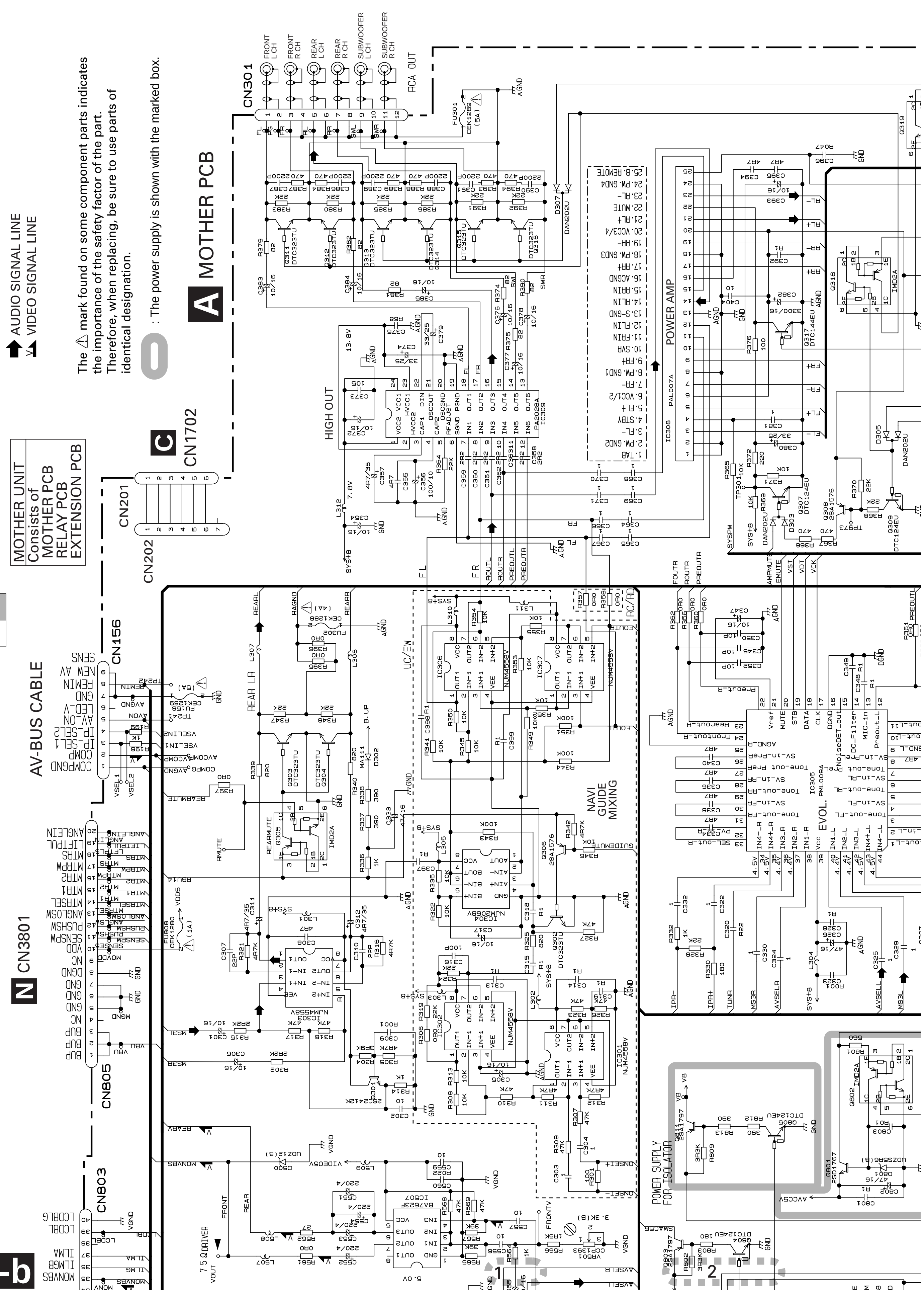
⊣⊢ Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as :
2.2 → 2R2
0.022 → R022


A-b
A-a
A
B
C
D
E
F
I CN4461
CN972
CN971
D CN1501
CN203
D CN1611
CN152
G CN1405
OPTICAL OUTPUT BUFFER
OPT 5V
IC971 TC7WT125FU
VIDEO ISOLATOR
MS3 VIDEO RCA INPUT VIDEO
IC504 NJM2137V
IC501 NJM2137V
IC502 NJM2137V
IC503 NJM2137V
IC505 NJM2137V
NAVI DVD VIDEO
AV-BUS VIDEO
BACK CAMERA
UC/EW
IC506 CXA2089Q
AV SELECTOR
IC603
NM
RC/RD
75Ω DRIVER
5.0V
IC201 TC74VHCT08AFT
3V→5V
IC203 TC74VHC08FT
5V→3V
IC202 SM5304AV
VIDEO FILTER
IC151 TA2050F
IC152 TA2050F
AUDIO ISOLATOR
IC602 S-80841CNUA-B82
Q903 2SA1797
Q904 DTC124EU
Q205 2SA1576
Q206 DTC124EU
Q803 2SA1797
Q804 DTC124EU
VDD5
VCC5
B.UP


5
6
7
8
A-b
A
B
C
D
E
F
A-a
SYSTEM CONTROLLER
IC601
V850
EW:PE5347A
UC·RC·RD:PE5348A
IC602
S-80841CNUA-B82
IC153
TA2050F
IC154
HA12187FP
IP-BUS DRIVER
IC155
TC4S81F
CN101
M
CN5901
CN153
B
CN1500
CN154
IP-BUS CORD
CN155
CN151
NAVI 26PIN RGB CABLE
UC/EW
UC/RD/RC
EW
BZ101
CPV1063
X601
CSS1622
18.874368MHz

A-b


A MOTHER PCB
C CN1702
N CN3801
CN301
RCA OUT
FRONT L CH
FRONT R CH
REAR L CH
REAR R CH
SUBWOOFER L CH
SUBWOOFER R CH
FU301 CEK1289 (5A)
HIGH OUT
IC309 PA2028A
POWER AMP
IC308 PAL007A
1.TAB
2.PW.GND2
3.FL-
4.STBY
5.FL+
6.VCC1/2
7.FR-
8.PW.GND1
9.FR+
10.SVR
11.FRIN
12.FLIN
13.S-GND
14.RLIN
15.RRIN
16.ACGND
17.RR+
18.PW.GND3
19.RR-
20.VCC3/4
21.RL+
22.MUTE
23.RL-
24.PW.GND4
25.B.REMOTE
CN201
CN202
CN156
AV-BUS CABLE
COMPGND
COMP
IP-SEL1
IP-SEL2
AV-ON
LED-V
GND
REMIN
NEW AV
SENS
CN805
CN803
REAR LR
UC/EW
IC306 NJM4558V
IC307 NJM4558V
IC304 NJM2068V
IC303 NJM4558V
IC302 NJM4558V
IC301 NJM4558V
NAVI GUIDE MIXING
IC305 PML009A
EVOL.
IC507 BA7623F
7.5 Ω DRIVER
POWER SUPPLY FOR ISOLATOR
FU302 CEK1288 (4A)
FU808 CEK1280 (1A)
FU158 CEK1289 (5A)
RC/RD

AUDIO SIGNAL LINE

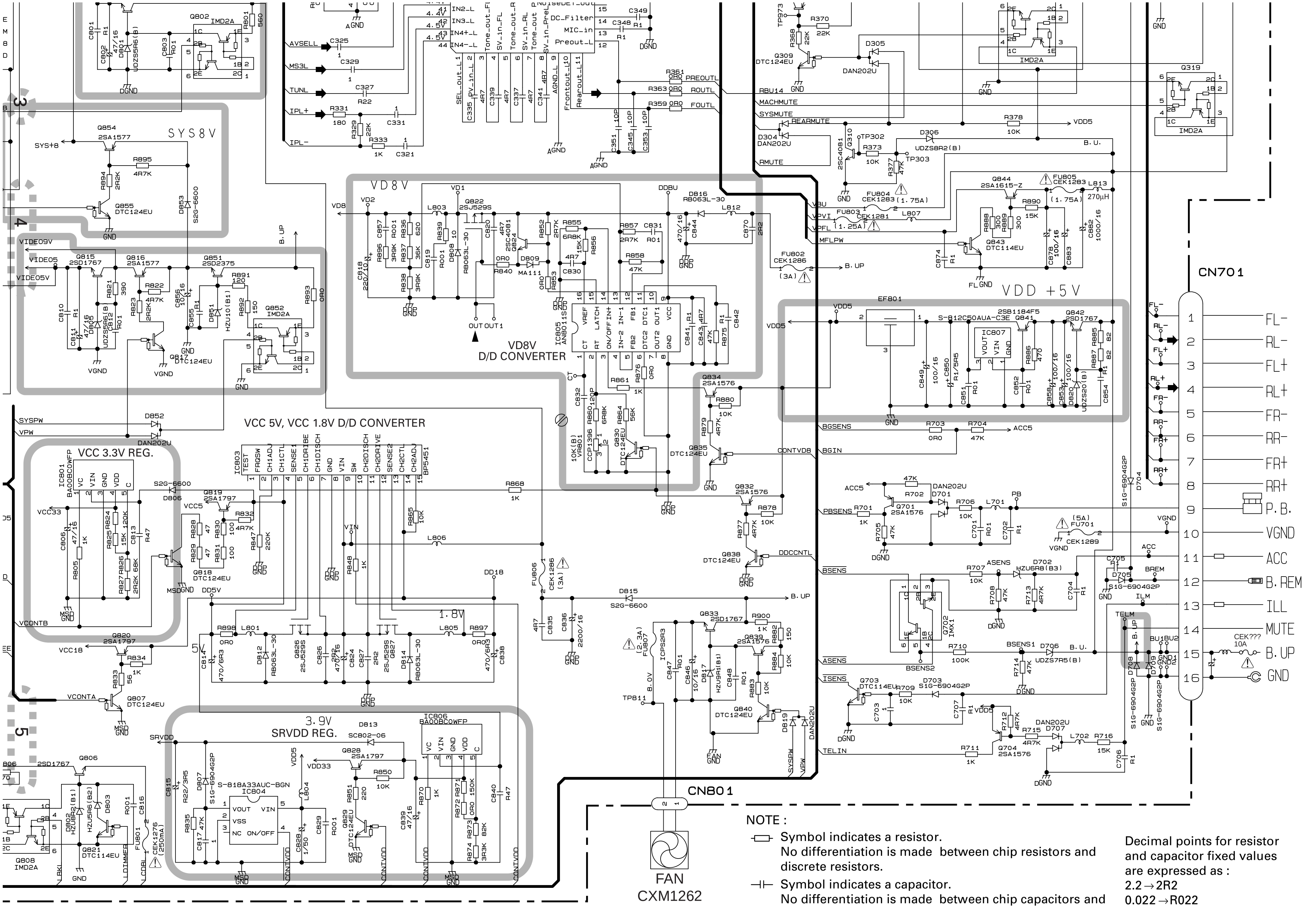
VIDEO SIGNAL LINE

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

: The power supply is shown with the marked box.

MOTHER UNIT
Consists of
MOTHER PCB
RELAY PCB
EXTENSION PCB

A-a	A-b



CN701
FL-
RL-
FL+
RL+
FR-
RR-
FR+
RR+
P.B.
VGND
ACC
B.REM
ILL
MUTE
B.UP
GND
CEK???
10A
VDD +5V
EF801
S-812C50AUA-C3E
IC807
2SB1184F5
Q841
Q842
2SD1767
VD8V
VD8V
D/D CONVERTER
IC805
AN8015SH
SYS8V
VCC 3.3V REG.
IC801
BA00BC0WFP
VCC 5V, VCC 1.8V D/D CONVERTER
IC803
BP5451
1.8V
3.9V
SRVDD REG.
IC804
S-818A33AUC-BGN
IC806
BA00BC0WFP
CN801
FAN
CXM1262
Q844
2SA1615-Z
Q843
DTC114EU
Q319
IMD2A
Q309
DTC124EU
Q310
2SC4081
Q802
IMD2A
Q854
2SA1577
Q855
DTC124EU
Q815
2SD1767
Q816
2SA1577
Q851
2SD2375
Q852
IMD2A
Q822
2SJ529S
Q824
2SC4081
Q830
DTC124EU
Q834
2SA1576
Q835
DTC124EU
Q832
2SA1576
Q838
DTC124EU
Q819
2SA1797
Q818
DTC124EU
Q820
2SA1797
Q807
DTC124EU
Q826
2SJ529S
Q827
2SJ529S
Q833
2SD1767
Q839
2SA1576
Q840
DTC124EU
Q828
2SA1797
Q829
DTC124EU
Q806
2SD1767
Q821
DTC114EU
Q808
IMD2A
Q701
2SA1576
Q702
IMX1
Q703
DTC114EU
Q704
2SA1576
FU805
CEK1283
FU804
CEK1283
FU803
CEK1281
FU802
CEK1286
FU806
CEK1286
FU807
ICP52R3
FU701
CEK1289
FU801
CEK1276
B.UP
VDD5
ACC5
AVSELL
MS3L
TUNL
IPL+
IPL-
PREOUTL
ROUTL
FOUTL
RBU14
MACHMUTE
SYSMUTE
REARMUTE
RMUTE
VBU
VPVI
VPFL
MFLPW
BGSENS
BGIN
CONTVDB
PBSENS
DDCCNTL
BSENS
ASENS
ISENS
TELIN
SYSPW
VPW
VCC33
VCONTB
VCC18
VCONTA
SRVDD
VIDEO9V
VIDEO5
VIDEO5V
SYS+8

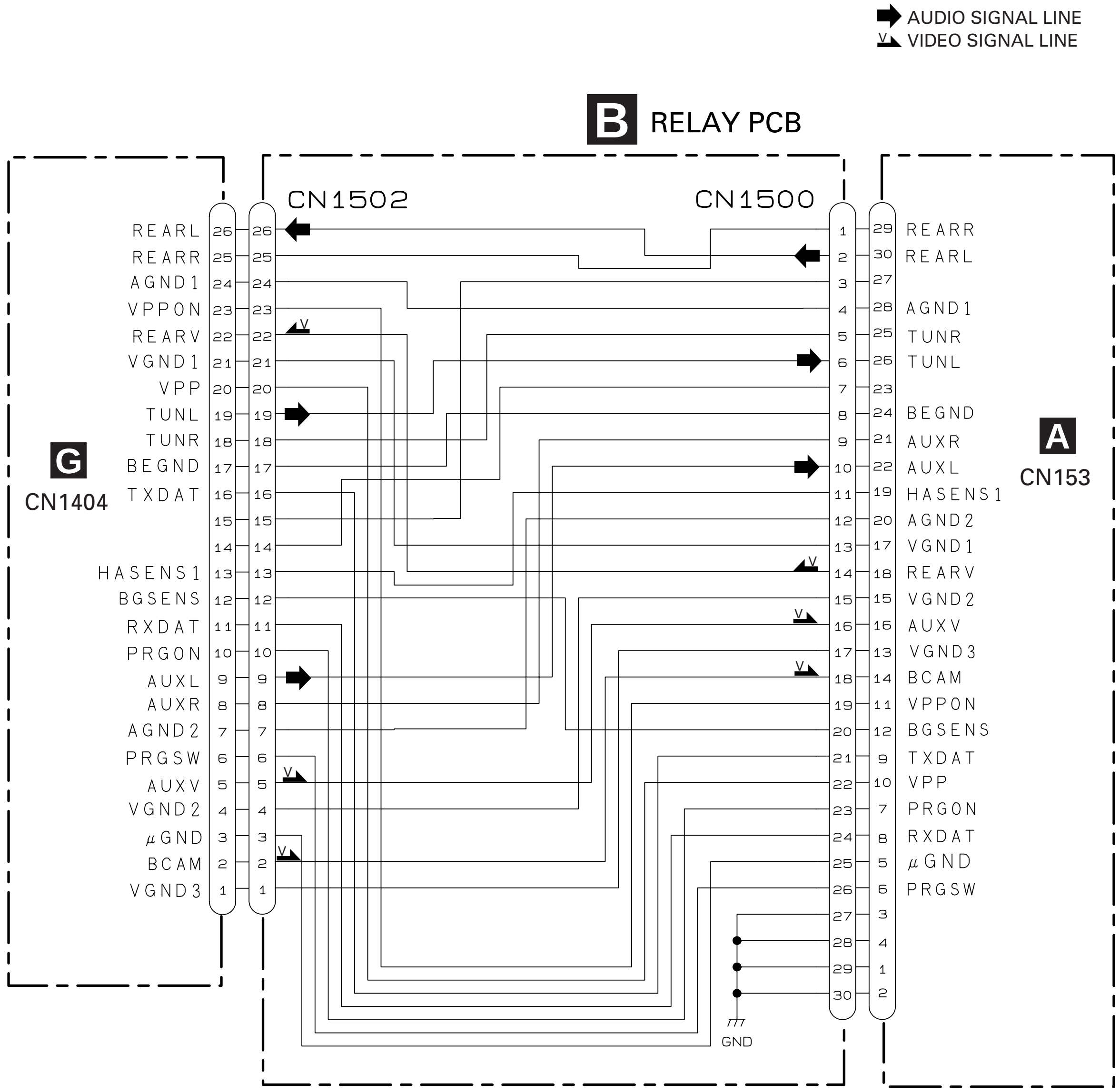
NOTE :

- Symbol indicates a resistor.
  No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor.
  No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as :
2.2→2R2
0.022→R022

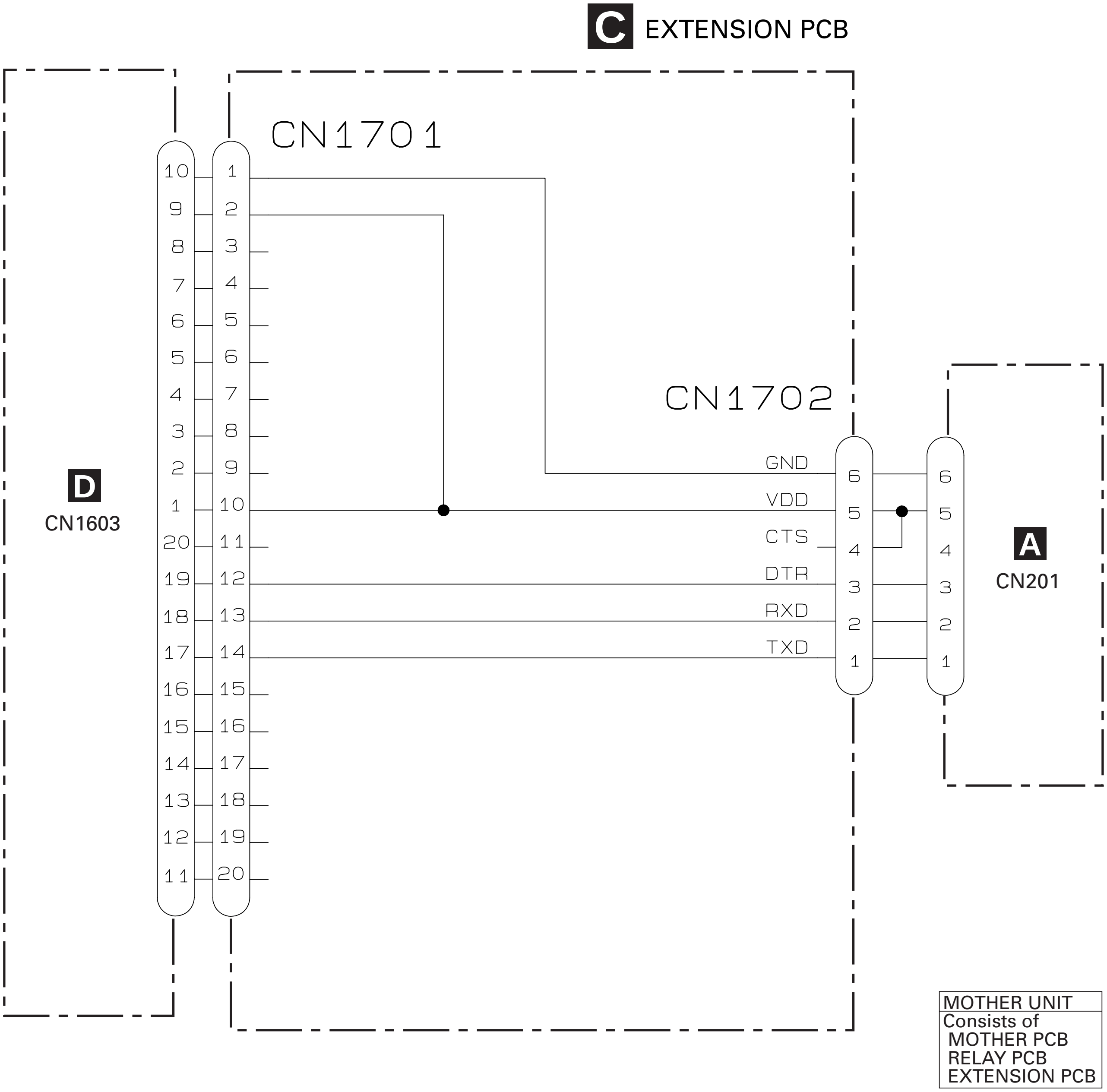
A-a A-b

3.4 RELAY PCB


AUDIO SIGNAL LINE
VIDEO SIGNAL LINE
B RELAY PCB
CN1502
CN1500
G
CN1404
A
CN153
REARL 26
REARR 25
AGND1 24
VPPON 23
REARV 22
VGND1 21
VPP 20
TUNL 19
TUNR 18
BEGND 17
TXDAT 16
15
14
HASENS1 13
BGSENS 12
RXDAT 11
PRGON 10
AUXL 9
AUXR 8
AGND2 7
PRGSW 6
AUXV 5
VGND2 4
μGND 3
BCAM 2
VGND3 1
1 29 REARR
2 30 REARL
3 27
4 28 AGND1
5 25 TUNR
6 26 TUNL
7 23
8 24 BEGND
9 21 AUXR
10 22 AUXL
11 19 HASENS1
12 20 AGND2
13 17 VGND1
14 18 REARV
15 15 VGND2
16 16 AUXV
17 13 VGND3
18 14 BCAM
19 11 VPPON
20 12 BGSENS
21 9 TXDAT
22 10 VPP
23 7 PRGON
24 8 RXDAT
25 5 μGND
26 6 PRGSW
27 3
28 4
29 1
30 2
GND
V

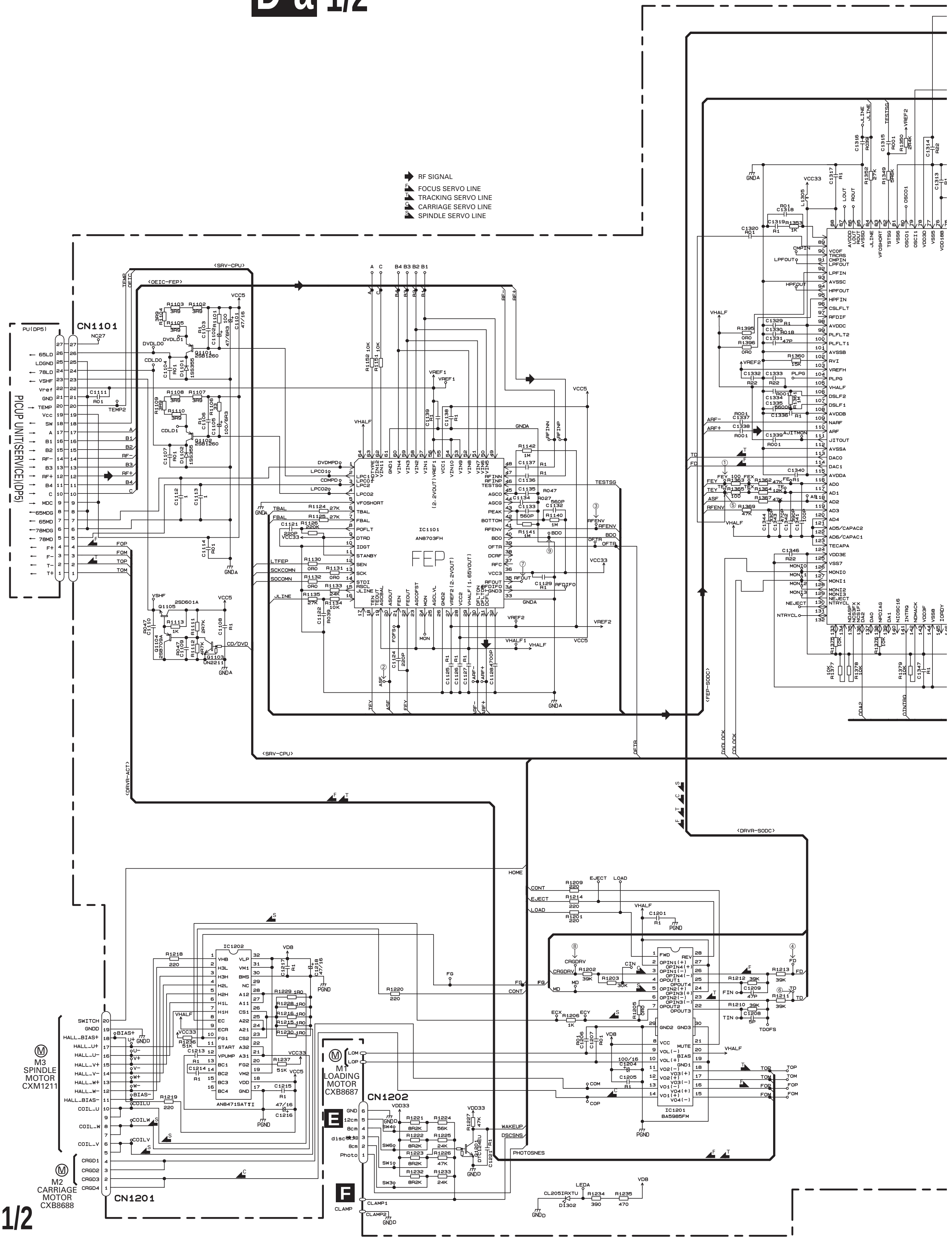
MOTHER UNIT
Consists of
MOTHER PCB
RELAY PCB
EXTENSION PCB

3.5 EXTENSION PCB


C EXTENSION PCB
CN1701
CN1702
D
CN1603
A
CN201
GND
VDD
CTS
DTR
RXD
TXD
MOTHER UNIT
Consists of
MOTHER PCB
RELAY PCB
EXTENSION PCB

3.6 DVD CORE UNIT(MS3)(SODC)(GUIDE PAGE)

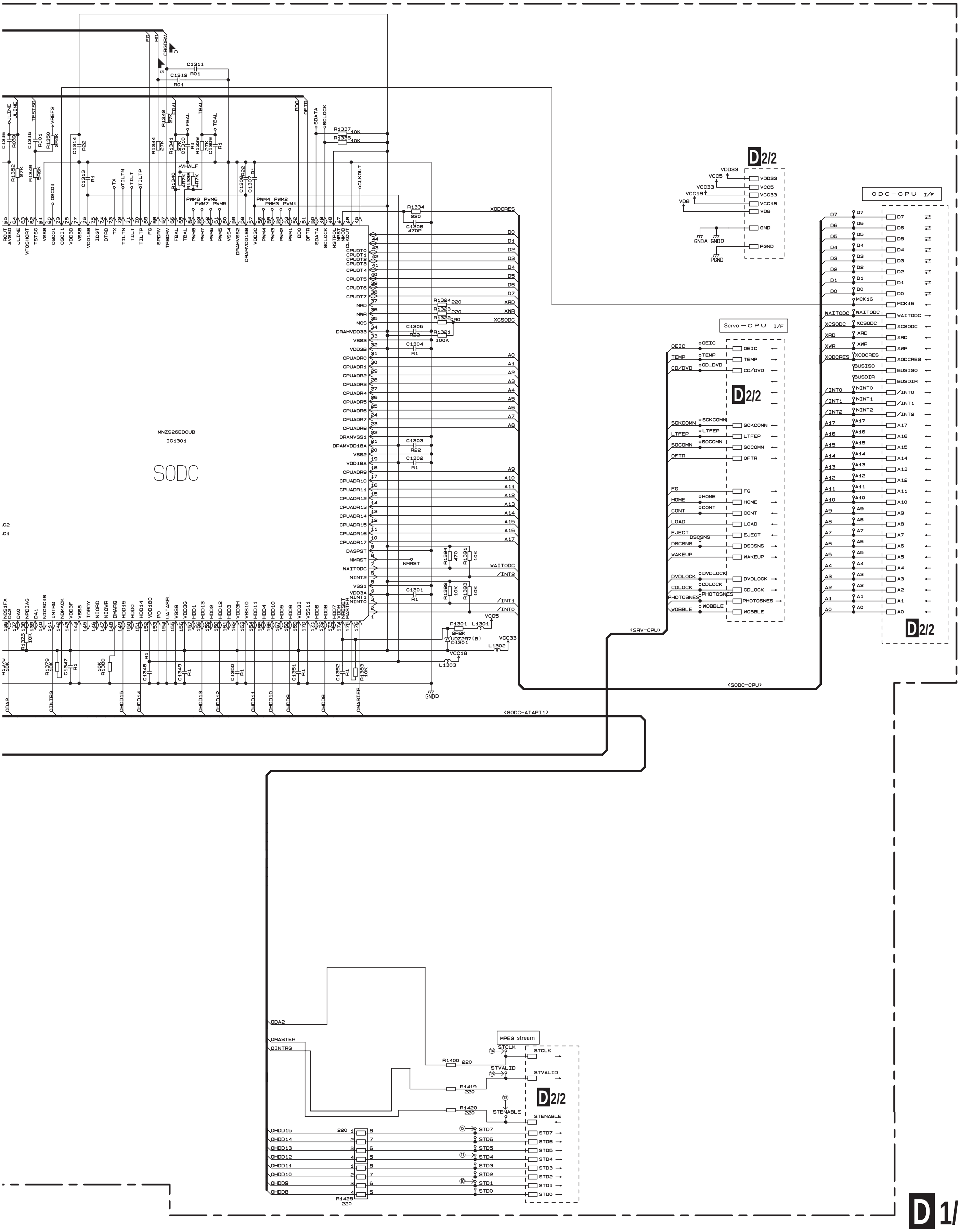
D-a 1/2



RF SIGNAL
FOCUS SERVO LINE
TRACKING SERVO LINE
CARRIAGE SERVO LINE
SPINDLE SERVO LINE
PU(DP5)
PICUP UNIT(SERVICE)(DP5)
CN1101
65LD
LDGND
78LD
VSHF
Vref
GND
TEMP
Vcc
SW
A
B1
B2
RF-
B3
RF+
B4
C
MDC
65MDG
65MD
78MDG
78MD
F+
F-
T-
T+
FOP
FOM
TOP
TOM
(SRV-CPU)
(OEIC-FEP)
IC1101
AN8703FH
FEP
Q1101 2SB1260
Q1102 2SB1260
D1101 1SS355
D1102 1SS355
Q1105 2SD601A
Q1104 2SB709A
Q1103 UN2211
VCC5
VCC33
VREF1
VREF2
VHALF
VHALF1
GNDA
TESTSG
CD/DVD
(DRVR-ACT)
(DRVR-SODC)
(FEP-SODC)
HOME
CONT
EJECT
LOAD
IC1201
BA5985FM
IC1202
AN8471SATII
CN1201
CN1202
M3 SPINDLE MOTOR CXM1211
M2 CARRIAGE MOTOR CXB8688
M1 LOADING MOTOR CXB8687
SWITCH
GNDD
HALL_BIAS+
HALL_U+
HALL_U-
HALL_V+
HALL_V-
HALL_W+
HALL_W-
HALL_BIAS-
COIL_U
COIL_W
COIL_V
CRGD1
CRGD2
CRGD3
CRGD4
LOM
LOP
GND
12cm
8cm
disc
Photo
CLAMP
CLAMP1
CLAMP2
WAKEUP
DSCSNS
PHOTOSNES
CL2051RXTU
D1302
LEDA
VD8
VDD33
PGND
E
F

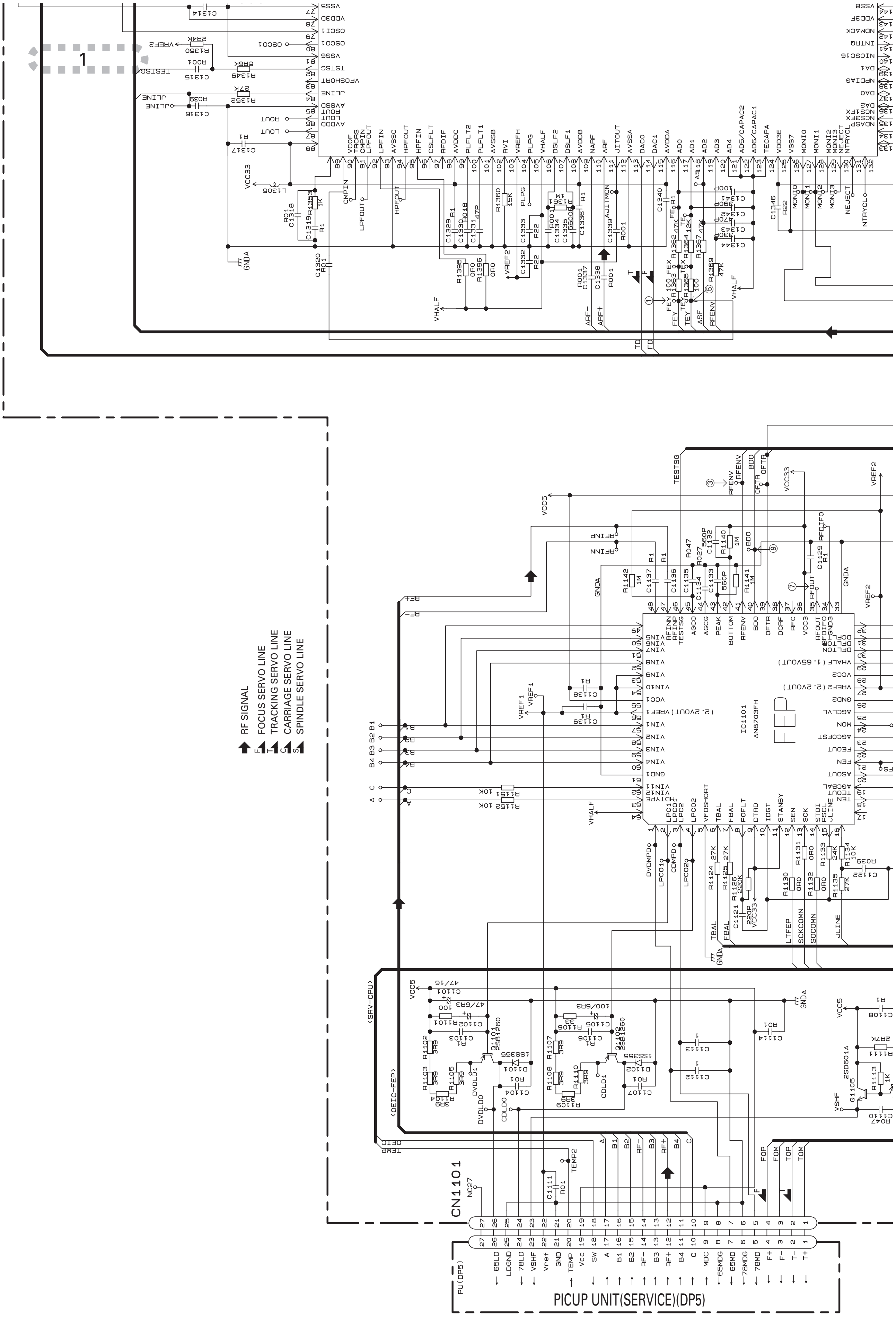
D-b 1/2

D1/2 DVDCORTE UNIT(MS3) (SODC)


SODC
MNZS26EDCUB
IC1301
ODC−CPU I/F
Servo−CPU I/F
D2/2
VDD33
VCC5
VCC33
VCC18
VD8
GND
PGND
GNDA
GNDD
XODCRES
D0
D1
D2
D3
D4
D5
D6
D7
XRD
XWR
XCSODC
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
WAITODC
/INT0
/INT1
/INT2
MCK16
BUSISO
BUSDIR
OEIC
TEMP
CD/DVD
SCKCOMN
LTFEP
SOCOMN
OFTR
FG
HOME
CONT
LOAD
EJECT
DSCSNS
WAKEUP
DVDLOCK
CDLOCK
PHOTOSNES
WOBBLE
<SRV-CPU>
<SODC-CPU>
<SODC-ATAPI1>
C1311
C1312
R1337 10K
R1336 10K
R1334 220
C1306 470P
R1324 220
R1323 220
R1322 0R0
R1321 100K
C1305
C1304
C1303
C1302
C1301
R1394 470
R1391 10K
R1392 10K
R1393 10K
NMRST
R1301 2R2K
L1301
L1302
L1303
D1301 UDZ2R7(B)
VCC5
VCC33
VCC18
GNDD
MPEG stream
STCLK
STVALID
STENABLE
R1400 220
R1419 220
R1420 220
R1425 220
ODA2
OMASTER
OINTRQ
OHDD15
OHDD14
OHDD13
OHDD12
OHDD11
OHDD10
OHDD9
OHDD8
STD7
STD6
STD5
STD4
STD3
STD2
STD1
STD0
⑩
⑪
⑫
⑬
⑭
⑮
D 1/2

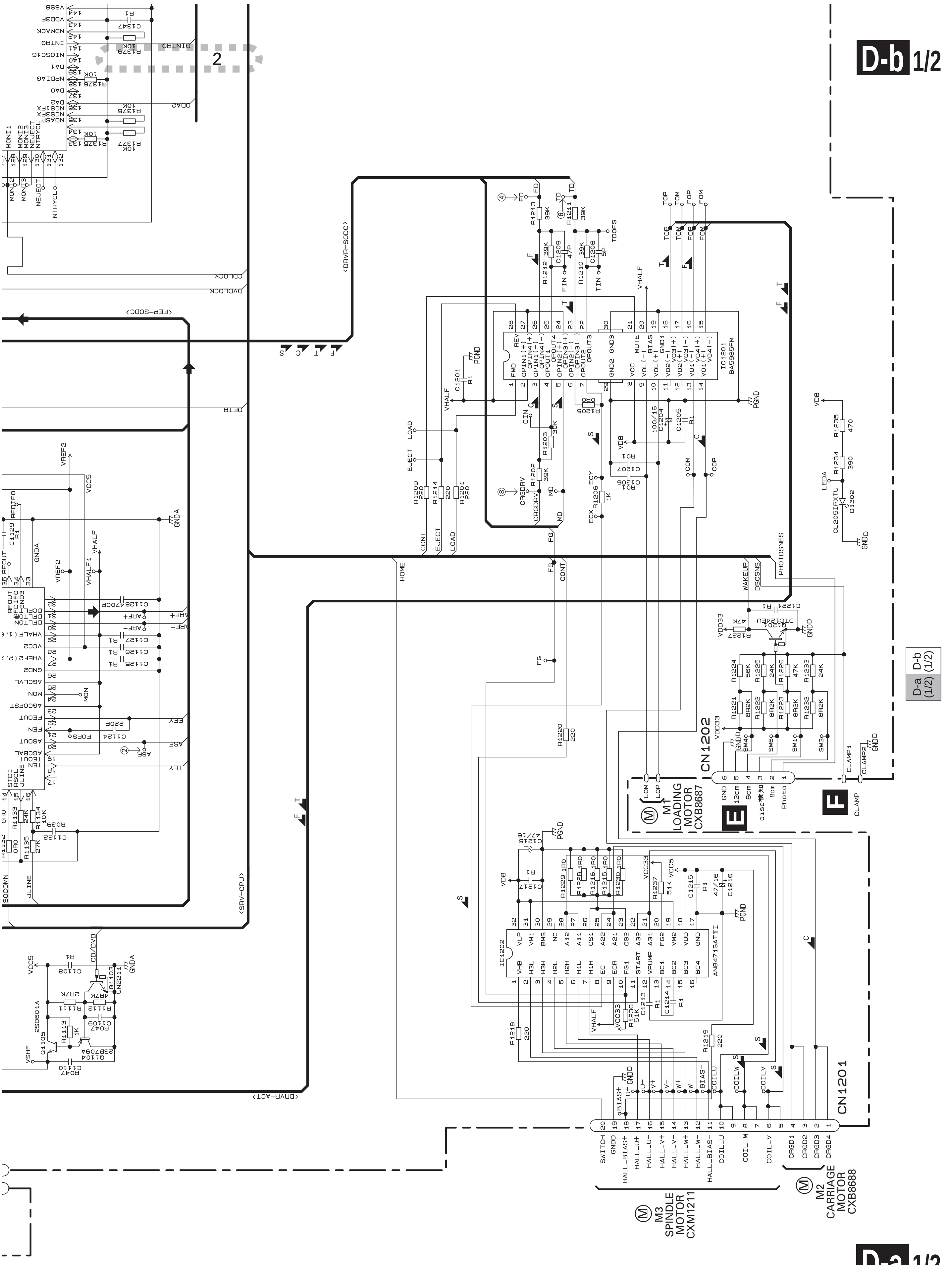
D-b 1/2

D-b (1/2)
D-a (1/2)

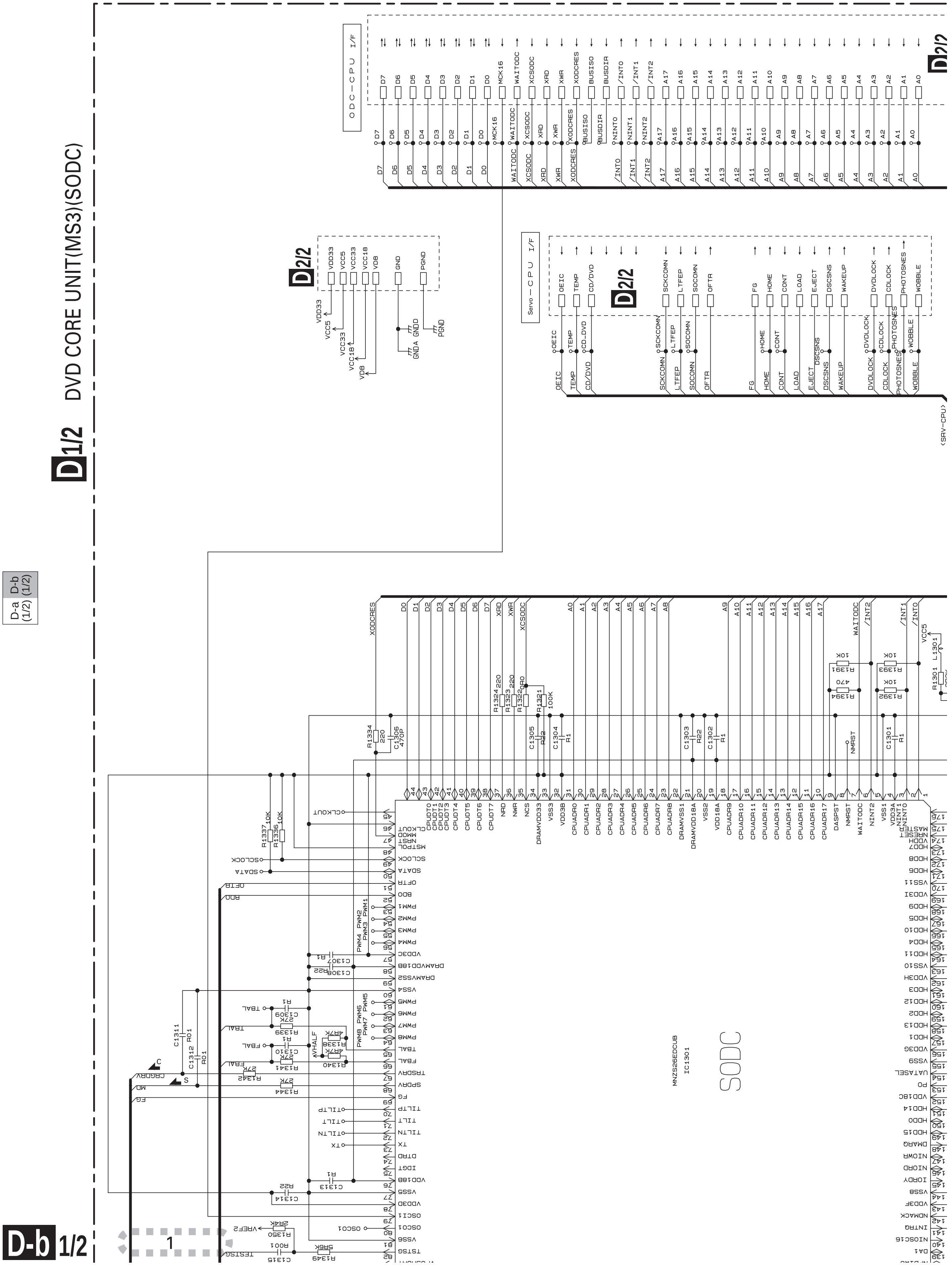

RF SIGNAL
F FOCUS SERVO LINE
T TRACKING SERVO LINE
C CARRIAGE SERVO LINE
S SPINDLE SERVO LINE
IC1101
AN8703FH
FEP
Q1101 2SB1260
Q1102 2SB1260
Q1105 2SD601A
D1101 1SS355
D1102 1SS355
VCC5
VCC33
VHALF
VREF1
VREF2
GNDA
RF+
RF−
(SRV-CPU)
(OEIC-FEP)
OEIC
TEMP
NC27
TEMP2
CN1101
PU(DP5)
65LD
LDGND
78LD
VSHF
Vref
GND
TEMP
Vcc
SW
A
B1
B2
RF−
B3
RF+
B4
C
MDC
65MDG
65MD
78MDG
78MD
F+
F−
T−
T+
FOP
FOM
TOP
TOM
PICUP UNIT(SERVICE)(DP5)

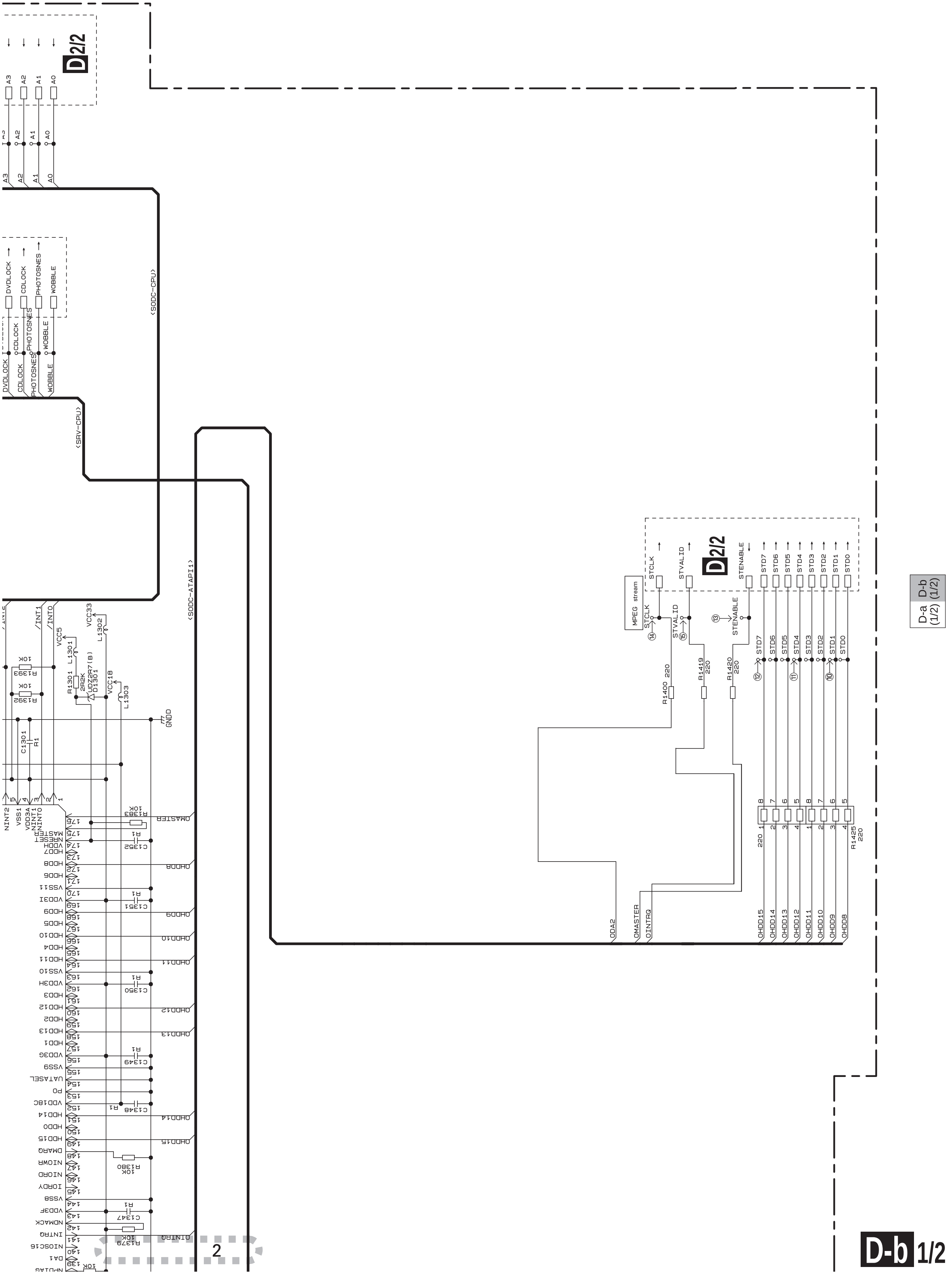
D-a 1/2

D-b 1/2


IC1201
BA5985FM
IC1202
AN8471SATII
CN1202
CN1201
M1
LOADING
MOTOR
CXB8687
M2
CARRIAGE
MOTOR
CXB8688
M3
SPINDLE
MOTOR
CXM1211
E
F
D-a (1/2)
D-b (1/2)
<DRVR-SODC>
<FEP-SODC>
<SRV-CPU>
<DRVR-ACT>
2
VDD8
VCC33
VCC5
VHALF
PGND
GNDD
GNDA
CLAMP
LOM
LOP
GND
12cm
8cm
disc検知
Photo
SWITCH
GNDD
HALL_BIAS+
HALL_U+
HALL_U-
HALL_V+
HALL_V-
HALL_W+
HALL_W-
HALL_BIAS-
COIL_U
COIL_W
COIL_V
CRGD1
CRGD2
CRGD3
CRGD4
HOME
CONT
EJECT
LOAD
FG
MD
CRGDRV
TOP
TOM
FOP
FOM
FD
TD
TDOFS
FIN
TIN
CIN
COM
COP
ECX
ECY
WAKEUP
DSCSNS
PHOTOSNES
CL205IRXTU
D1302
LEDA
Q1201
DTC124EU
Q1103
UN2211
Q1104
2SB709A
Q1105
2SD601A
CD/DVD
VSHF
SOCOMN
JLINE

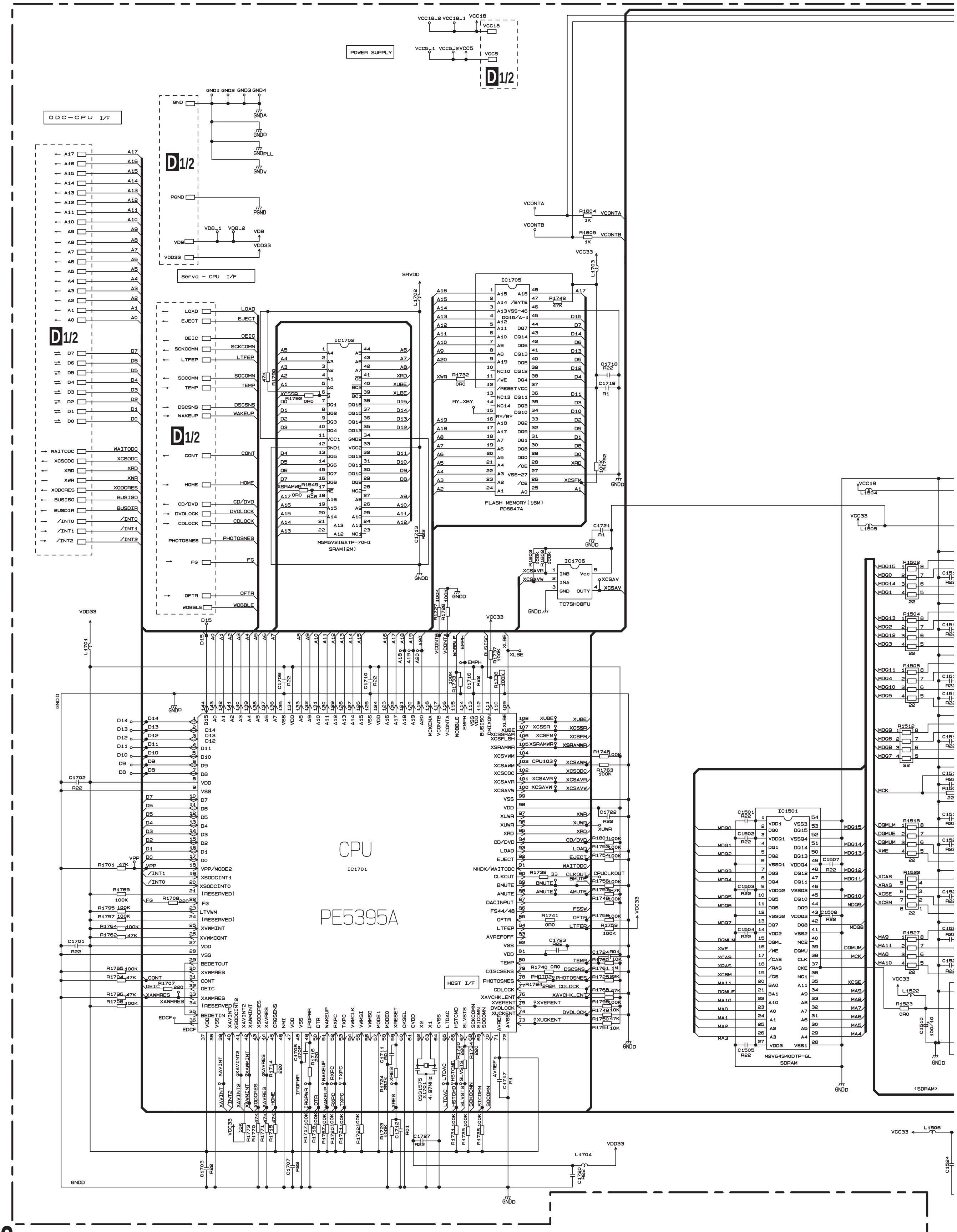
D-a 1/2


DVD CORE UNIT(MS3)(SODC)
D 1/2
D 2/2
D-a (1/2)
D-b (1/2)
D-b 1/2
ODC－CPU I/F
Servo－CPU I/F
<SRV-CPU>
D7
D6
D5
D4
D3
D2
D1
D0
MCK16
WAITODC
XCSODC
XRD
XWR
XODCRES
BUSISO
BUSDIR
/INT0
/INT1
/INT2
A17
A16
A15
A14
A13
A12
A11
A10
A9
A8
A7
A6
A5
A4
A3
A2
A1
A0
VDD33
VCC5
VCC33
VCC18
VD8
GND
PGND
GNDA
GNDD
OEIC
TEMP
CD/DVD
SCKCOMN
LTFEP
SOCOMN
OFTR
FG
HOME
CONT
LOAD
EJECT
DSCSNS
WAKEUP
DVDLOCK
CDLOCK
PHOTOSNES
WOBBLE
R1324 220
R1323 220
R1322 220
R1321 100K
R1334 220
C1306 470P
C1305 R22
C1304 R1
C1303 R22
C1302 R1
C1301 R1
R1391 10K
R1394 470
R1393 10K
R1392 10K
NMRST
VCC5
L1301
R1301
R1337 10K
R1336 10K
CLKOUT
SCLOCK
SDATA
OETR
BDO
PWM1
PWM2
PWM3
PWM4
PWM5
PWM6
PWM7
PWM8
C1307 R1
C1308 R22
C1309 R1
C1310 R1
R1339 27K
R1341 27K
R1338 4.7K
R1340 4.7K
R1342 27K
R1344 27K
AVHALF
TBAL
FBAL
CBGDRV
MD
FG
C1311
C1312
R01
C
S
TILTP
TILT
TILTN
TX
C1313 R1
C1314 R22
OSCO1
VREF2
R1350 2.4K
R1349 5.6K
C1315 R01
TESTSG
1
MNZS26EDCUB
IC1301
SODC
CLKOUT
NRST
MMOD
MSTPOL
SCLOCK
SDATA
OFTR
BDO
VDD3C
DRAMVDD18B
DRAMVSS2
VSS4
TBAL
FBAL
TRSDRV
SPDRV
FG
TILTP
TILT
TILTN
TX
DTRD
IDGT
VDD18B
VSS5
VDD3D
OSCI1
OSCO1
VSS6
TSTSG
CPUDT0
CPUDT1
CPUDT2
CPUDT3
CPUDT4
CPUDT5
CPUDT6
CPUDT7
NRD
NWR
NCS
DRAMVDD33
VSS3
VDD3B
CPUADR0
CPUADR1
CPUADR2
CPUADR3
CPUADR4
CPUADR5
CPUADR6
CPUADR7
CPUADR8
DRAMVSS1
DRAMVDD18A
VSS2
VDD18A
CPUADR9
CPUADR10
CPUADR11
CPUADR12
CPUADR13
CPUADR14
CPUADR15
CPUADR16
CPUADR17
DASPST
NMRST
WAITODC
NINT2
VSS1
VDD3A
NINT1
NINT0
MASTER
NRESET
VDDH
HDD7
HDD8
HDD6
VSS11
VDD3I
HDD9
HDD5
HDD10
HDD4
HDD11
VSS10
VDDH
HDD3
HDD12
HDD2
HDD13
HDD1
VDDG
VSS9
UATASEL
PD
VDD18C
HDD14
HDD0
HDD15
DMARQ
NIOWR
NIORD
IORDY
VSS8
VDDF
NDMACK
INTRQ
NIOSC16
DA1


A
B
C
D
E
F
D2/2
A3
A2
A1
A0
DVDLOCK
CDLOCK
PHOTOSNES
WOBBLE
(SRV-CPU)
(SODC-CPU)
(SODC-ATAPI1)
/INT1
/INT0
VCC5
VCC33
VCC18
L1301
L1302
L1303
R1301
2R2K
D1301
UDZR27(B)
R1393
R1392
10K
C1301
R1
GNDD
MPEG stream
STCLK
STVALID
STENABLE
STD7
STD6
STD5
STD4
STD3
STD2
STD1
STD0
R1400
R1419
R1420
220
R1425
ODA2
OMASTER
OINTRQ
OHDD15
OHDD14
OHDD13
OHDD12
OHDD11
OHDD10
OHDD9
OHDD8
D-a (1/2)
D-b (1/2)
D-b 1/2
2

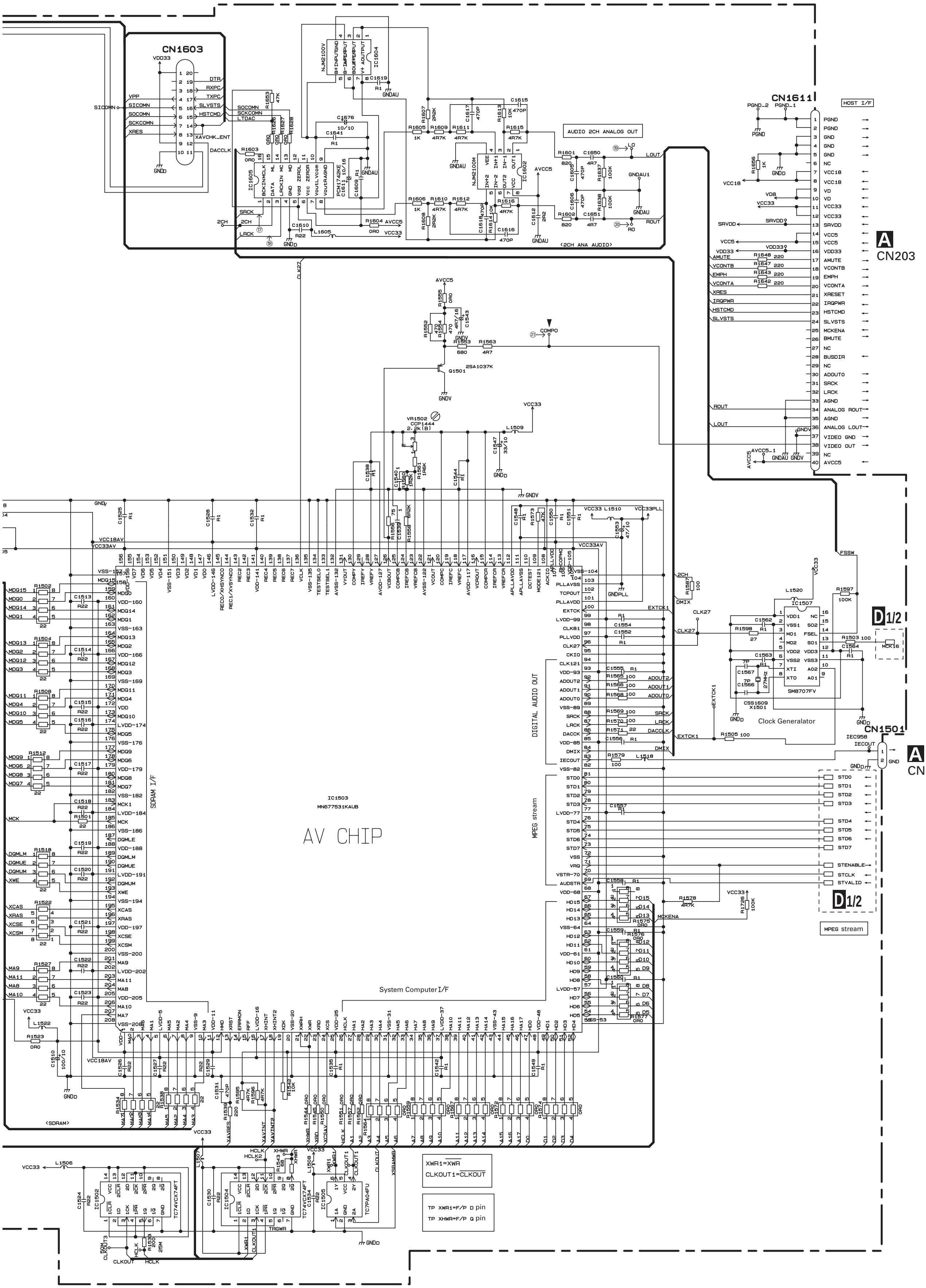
3.7 DVD CORE UNIT(MS3)(CPU)(GUIDE PAGE)

D-a 2/2


POWER SUPPLY
VCC18_2 VCC18_1 VCC18
VCC5_1 VCC5_2 VCC5
D1/2
GND1 GND2 GND3 GND4
GNDA
GNDD
GNDPLL
GNDV
PGND
VD8_1 VD8_2 VD8
VDD33
ODC-CPU I/F
Servo - CPU I/F
A17 A16 A15 A14 A13 A12 A11 A10 A9 A8 A7 A6 A5 A4 A3 A2 A1 A0
D7 D6 D5 D4 D3 D2 D1 D0
WAITODC XCSODC XRD XWR XODCRES BUSISO BUSDIR /INT0 /INT1 /INT2
LOAD EJECT OEIC SCKCOMN LTFEP SOCOMN TEMP DSCSNS WAKEUP CONT HOME CD/DVD DVDLOCK CDLOCK PHOTOSNES FG OFTR WOBBLE
SRVDD
IC1702
M5M5V216ATP-70HI
SRAM(2M)
IC1705
FLASH MEMORY(16M)
PD6647A
IC1706
TC7SH08FU
VCONTA VCONTB
R1804 1K
R1805 1K
VCC33
L1703
L1702
R1742 47K
C1718 R22
C1719 R1
R1732 0R0
RY_XBY
C1713 R22
C1721 R1
XCSAVR XCSAVW XCSAV
CPU
IC1701
PE5395A
HOST I/F
VDD33
L1701
C1702 R22
C1701 R22
C1706 R22
C1710 R22
C1722
C1723 R22
C1724 R01
R1701 47K
R1769 100K
R1708 220
R1795 100K
R1797 100K
R1764 100K
R1762 47K
R1765 100K
R1704 47K
R1707 220
R1796 47K
R1706 100K
R1714 220
R1739 33
R1741 0R0
R1740 0R0
R1794 2R2K
X1701 4.97MHz
CSS1575
C1703 R22
C1707 R22
C1717 R1
C1720 R22
C1727 R22
L1704
GNDD
IC1501
M2V64S40DTP-6L
SDRAM
R1502 R1504 R1508 R1512 R1518 R1522 R1527 R1523
C1501 R22
C1502 R22
C1503 R22
C1504 R22
C1505 R22
C1507 R22
C1508 R22
C1510 100/10
VCC18
L1504
L1505
L1506
L1522
C1524
MDG15 MDG0 MDG14 MDG1 MDG13 MDG2 MDG12 MDG3 MDG11 MDG4 MDG10 MDG5 MDG9 MDG6 MDG8 MDG7
MCK
DGMLM DGMUE DGMUM XWE
XCAS XRAS XCSE XCSM
MA9 MA11 MA8 MA10
<SDRAM>
D 2/2

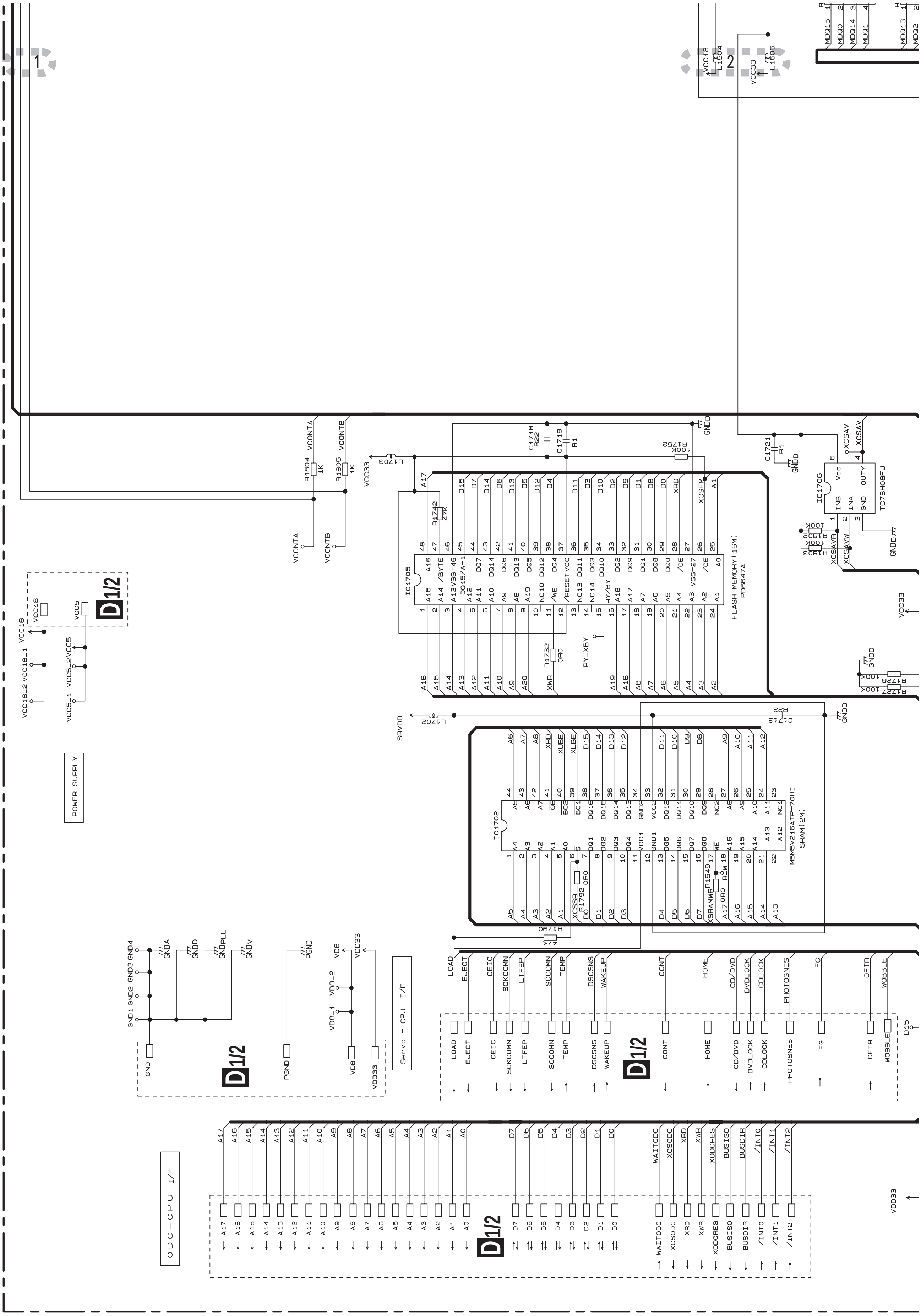
D-b 2/2

D 2/2 DVD CORE UNIT(MS3) (CPU)


CN1603
IC1604
NJM2100V
IC1605
PCM1742KE
IC1602
NJM2100M
AUDIO 2CH ANALOG OUT
(2CH ANA AUDIO)
CN1611
HOST I/F
A
CN203
Q1501
2SA1037K
COMPO
VR1502
IC1503
MN677531KAUB
AV CHIP
SDRAM I/F
DIGITAL AUDIO OUT
MPEG stream
System Computer I/F
IC1507
SM8707FV
X1501
Clock Generalator
D1/2
CN1501
A
CN971
MPEG stream
(SDRAM)
IC1502
TC74VCX74FT
IC1504
TC74VCX74FT
IC1505
TC7PA04FU
XWR1=XWR
CLKOUT1=CLKOUT
TP XWR1=F/P D pin
TP XHWR=F/P G pin

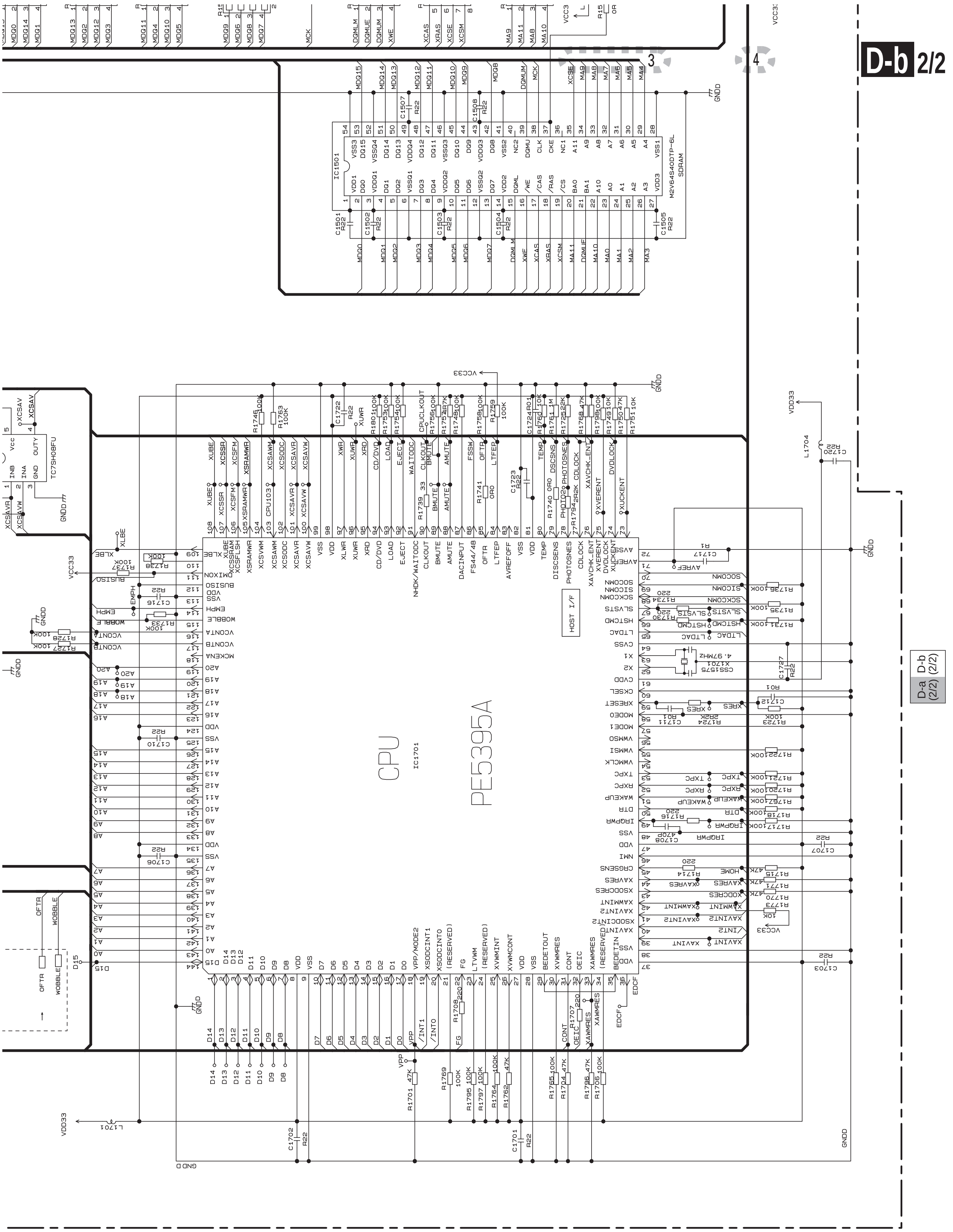
D 2/2

D-b 2/2


1
2
VCC18
L1504
VCC33
L1505
MDQ15
MDQ0
MDQ14
MDQ1
MDQ13
MDQ2
VCONTA
VCONTB
R1804 1K
R1805 1K
VCC33
L1703
R1742 47K
C1718 R22
C1719 R1
R1752 100K
GNDD
C1721 R1
XCSAV
IC1706
TC7SH08FU
INB
INA
GND
Vcc
OUTY
XCSAVR
XCSAVW
GNDD
IC1705
FLASH MEMORY(16M)
PD6647A
A15 A14 A13 A12 A11 A10 A9 A8 A19 A20 /WE /RESET NC13 NC14 RY/BY A18 A17 A7 A6 A5 A4 A3 A2 A1
A16 /BYTE VSS-46 DQ15/A-1 DQ7 DQ14 DQ6 DQ13 DQ5 DQ12 DQ4 VCC DQ11 DQ3 DQ10 DQ2 DQ9 DQ1 DQ8 DQ0 /OE VSS-27 /CE A0
A17 D15 D7 D14 D6 D13 D5 D12 D4 D11 D3 D10 D2 D9 D1 D8 D0 XRD XCSFM A1
A16 A15 A14 A13 A12 A11 A10 A9 A20 XWR RY_XBY A19 A18 A8 A7 A6 A5 A4 A3 A2
R1732 0R0
VCC18
VCC5
D1/2
VCC18_2 VCC18_1 VCC18
VCC5_1 VCC5_2 VCC5
POWER SUPPLY
SRVDD
L1702
C1713 R22
GNDD
VCC33
R1728 100K
R1727 100K
GNDD
IC1702
M5M5V216ATP-70HI
SRAM(2M)
A6 A7 A8 XRD XUBE XLBE D15 D14 D13 D12 D11 D10 D9 D8 A9 A10 A11 A12
A5 A4 A3 A2 A1 XCSSR D0 D1 D2 D3 D4 D5 D6 D7 XSRAMWR A17 A16 A15 A14 A13
R1792 0R0
R1549 0R0
R_W
R1790 47K
GND1 GND2 GND3 GND4
GNDA GNDD GNDPLL GNDV
PGND
VD8 VDD33
VD8_1 VD8_2
GND PGND VD8 VDD33
D1/2
Servo - CPU I/F
LOAD EJECT OEIC SCKCOMN LTFEP SOCOMN TEMP DSCSNS WAKEUP CONT HOME CD/DVD DVDLOCK CDLOCK PHOTOSNES FG OFTR WOBBLE
D15
D1/2
ODC-CPU I/F
A17 A16 A15 A14 A13 A12 A11 A10 A9 A8 A7 A6 A5 A4 A3 A2 A1 A0
D7 D6 D5 D4 D3 D2 D1 D0
WAITODC XCSODC XRD XWR XODCRES BUSISO BUSDIR /INT0 /INT1 /INT2
D1/2
VDD33
A B C D E F
D-a (2/2)
D-b (2/2)

D-a 2/2

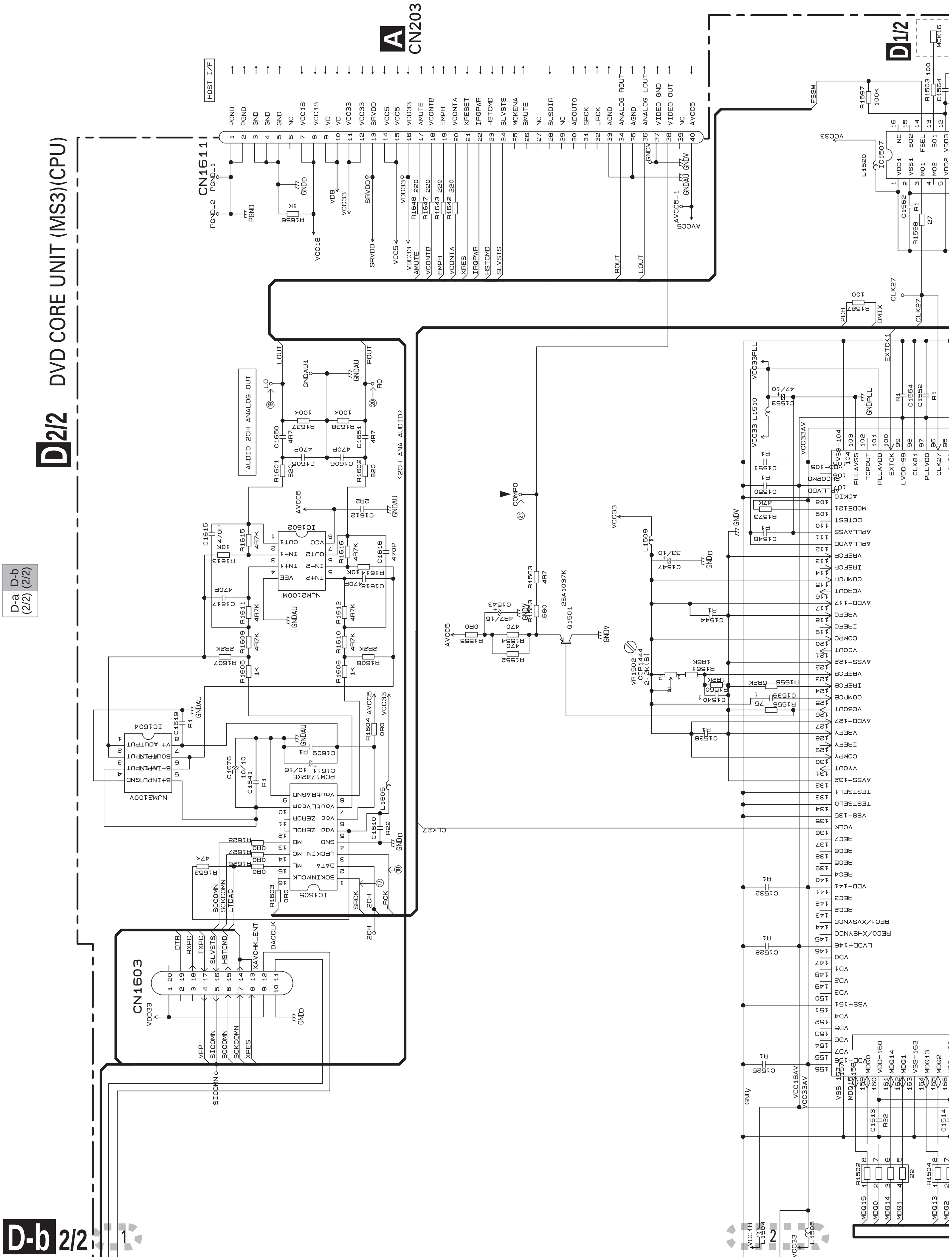
D-b 2/2


A
B
C
D
E
F
3
4
IC1501
M2V64S40DTP-6L
SDRAM
CPU
IC1701
PE5395A
TC7SH08FU
HOST I/F
D-b (2/2)
D-a (2/2)
VCC33
VDD33
GNDD

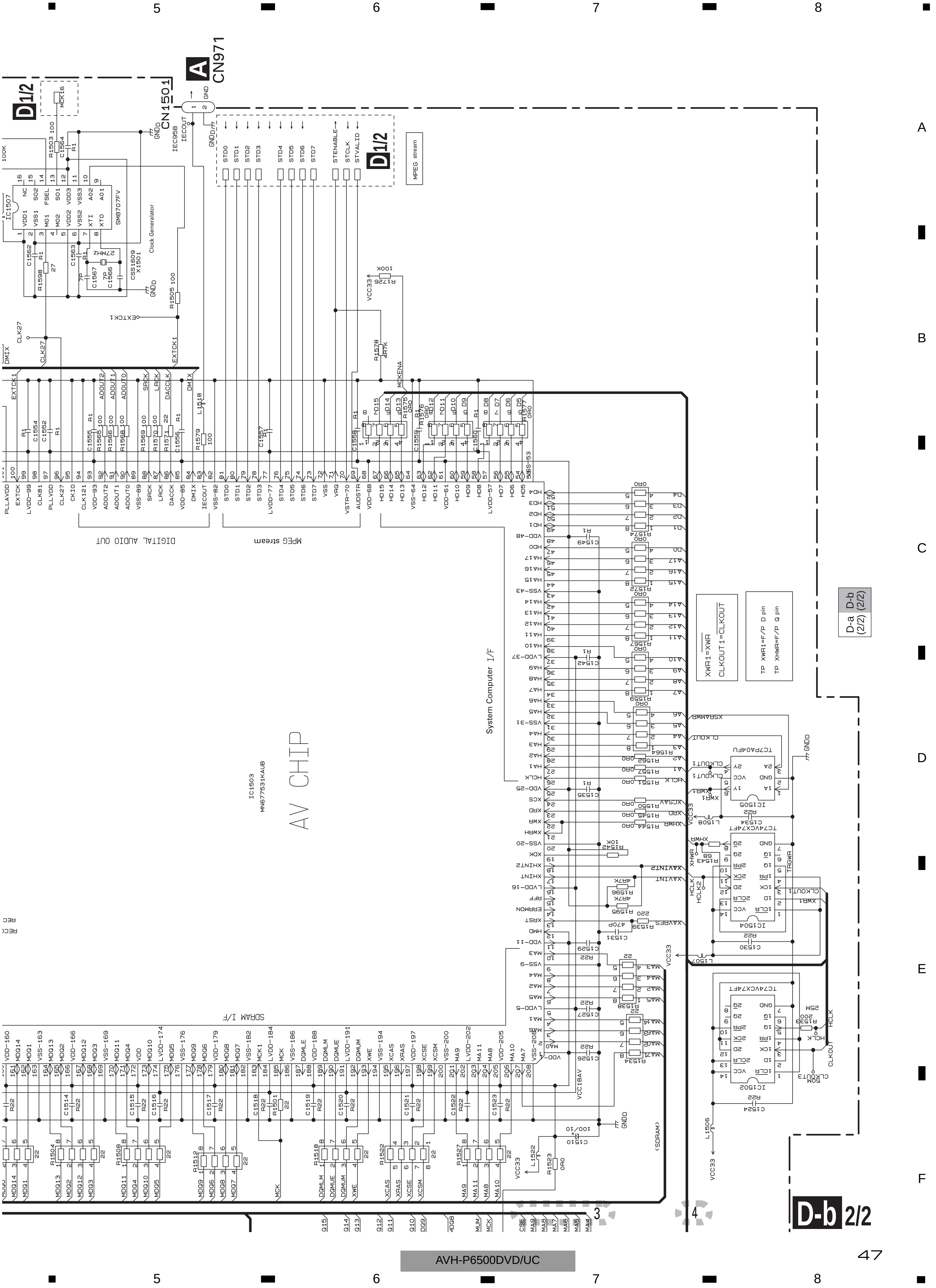
D-a 2/2

D 2/2 DVD CORE UNIT (MS3)(CPU)

D-a (2/2) D-b (2/2)


A CN203
HOST I/F
CN1611
D1/2
IC1507
AUDIO 2CH ANALOG OUT
<2CH ANA AUDIO>
IC1602 NJM2100M
IC1604 NJM2100V
IC1605 PCM1742KE
CN1603
Q1501 2SA1037K
VR1502 CCP1444 2.2k(B)
COMPO
LOUT
ROUT
SRCK
LRCK
2CH
CLK27
DMIX
FSSW
VCC33
AVCC5
GNDAU
GNDV
GNDD
VDD33
SIOOMN

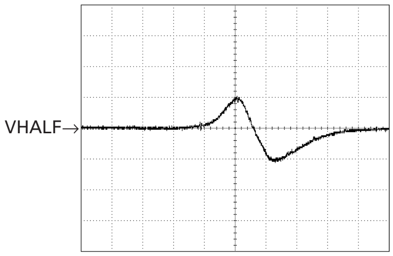
D-b 2/2

5
6
7
8
A
B
C
D
E
F
A CN971
CN1501
D 1/2
IC1507
SM8707FV
Clock Generator
X1501
CSS1609
27MHz
MPEG stream
IC1503
MN677531KAUB
AV CHIP
DIGITAL AUDIO OUT
System Computer I/F
SDRAM I/F
IC1505
TC7PA04FU
IC1504
TC74VCX74FT
IC1502
TC74VCX74FT
XWR1=XWR
CLKOUT1=CLKOUT
TP XWR1=F/P D pin
TP XHWR=F/P Q pin
D-a (2/2)
D-b (2/2)
<SDRAM>
D-b 2/2

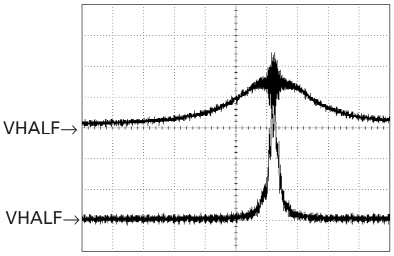
Waveforms

Note:1. The encircled number denote measuring pointes in the circuit diagram.
2. Reference voltage VHALF : 1.65V

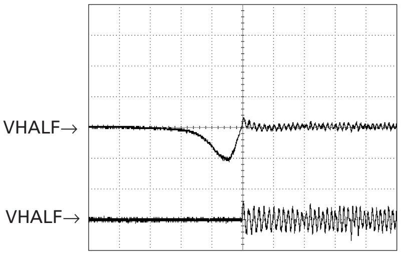
① FEY 500mV/div. 1ms/div.
Focus search



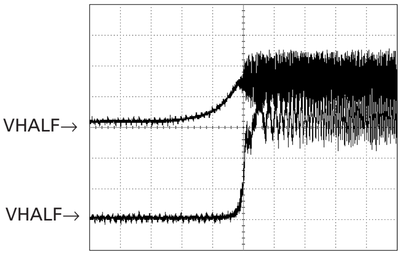
② CH1: ASF
③ CH2: RFENV 200ms/div. 1ms/div.
Focus search



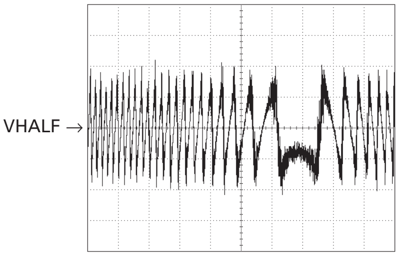
① CH1: FEY 500mV/div. 1ms/div.
④ CH2: FD 1V/div. 1ms/div.
Focus close



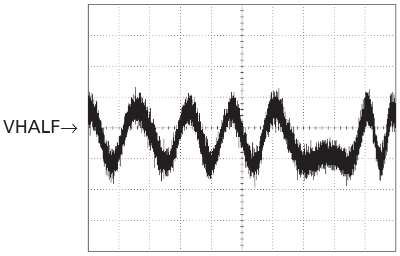
② CH1: ASF
③ CH1: RFENV 200mV/div. 2ms/div.
Focus close



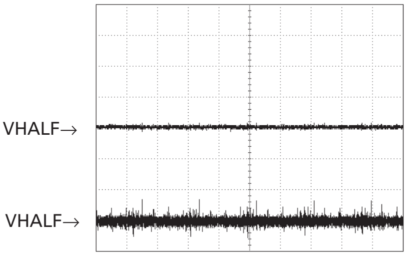
⑤ CH1: TEY 500mV/div. 1ms/div.
Focus close(DVD)



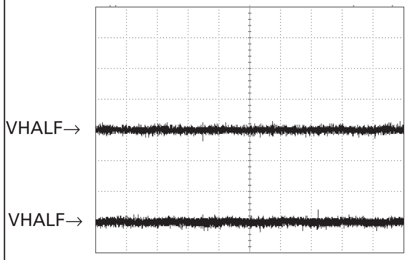
⑤ CH1: TEY 500mV/div. 1ms/div.
Focus close(CD)



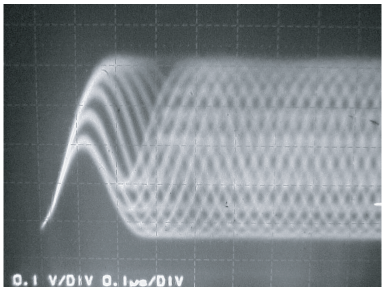
① CH1: FEY
④ CH2: FD 500mV/div.20ms/div.
Play



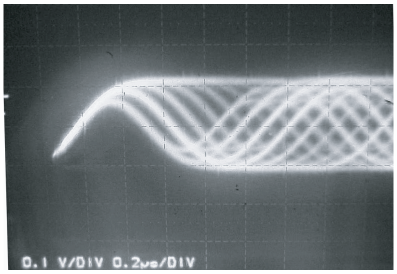
⑤ CH1: TEY
⑥ CH2: TD 500mV/div.20ms/div.
Play



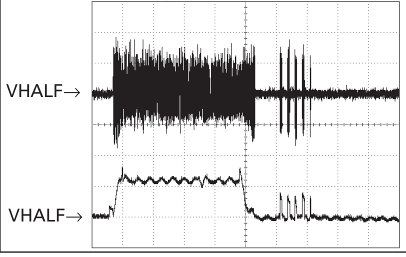
⑦ CH1: RFOUT 0.1V/div. 0.1µs/div.
Play(DVD surroundings on inside)



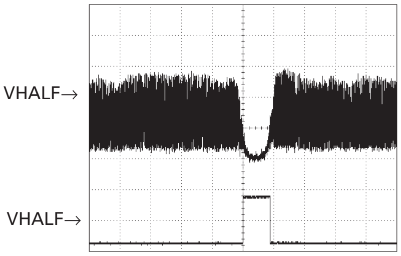
⑦ CH1: RFOUT 0.1V/div. 0.2µs/div.
Play(CD)



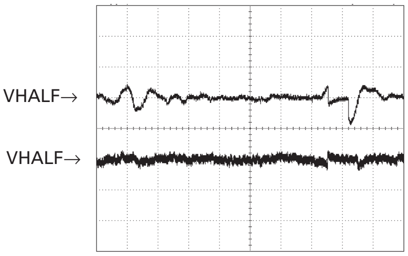
⑤ CH1: TEY 500mV/div. 100ms/div.
⑧ CH2: CRGDRV
Surroundings on inside->
surroundings on outside



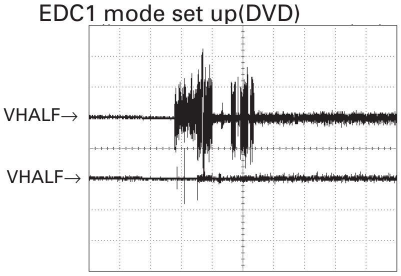
⑦ CH1: RFOUT 200mV/div. 100µs/div.
⑨ CH2: BDO 2V/div. 100µs/div.
Black dot



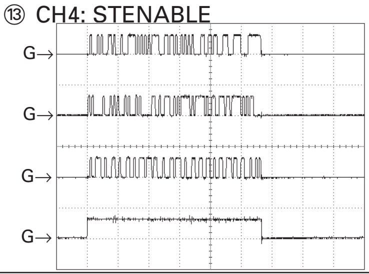
④ CH1: FD 1V/div. 100µs/div.
⑥ CH2: TD 500mV/div. 100µs/div.
Black dot



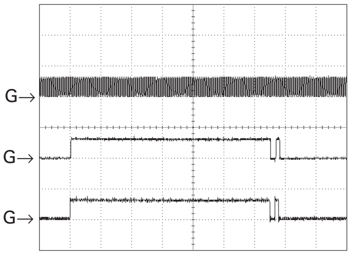
⑤ CH1: TEY 500mV/div.1s/div.
① CH2: FEY
EDC1 mode set up(DVD)



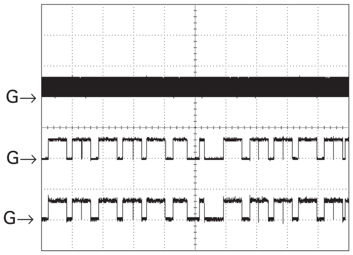
⑩ CH1: STD1
⑪ CH2: STD4 5V/div. 2µs/div.
⑫ CH3: STD7
⑬ CH4: STENABLE



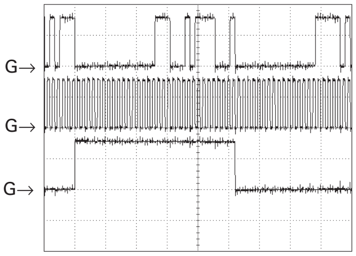
⑭ CH1: STCLK
⑮ CH2: STVALID 5V/div. 2µs/div.
⑬ CH3: STENABLE



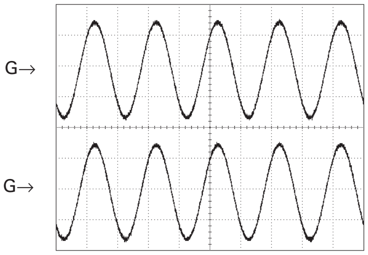
⑭ CH1: STCLK
⑮ CH2: STVALID 5V/div. 50µs/div.
⑬ CH3: STENABLE



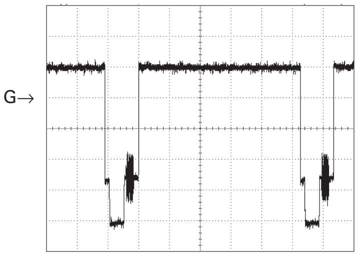
⑯ CH1: Not used
⑰ CH2: SRCK 2V/div. 2µs/div.
⑱ CH3: LRCK



⑲ CH1: LO 1V/div. 500µs/div.
⑳ CH2: RO

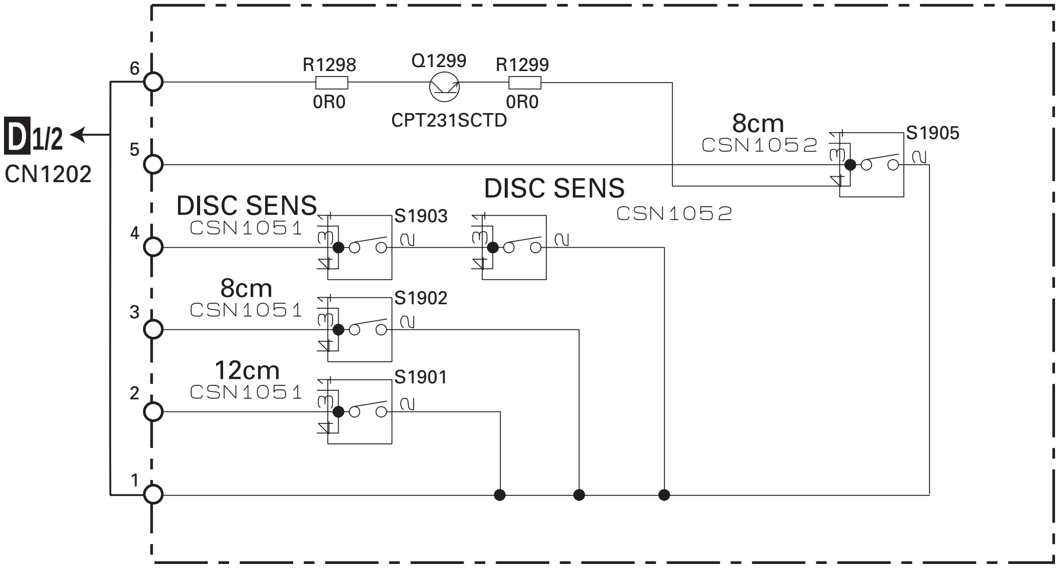


㉑ CH1: COMPO 200mV/div. 10µs/div.
[White 100% output]

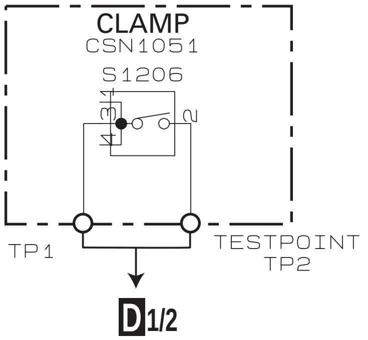


3.8 COMPOUND UNIT(A) AND COMPOUND UNIT(B)

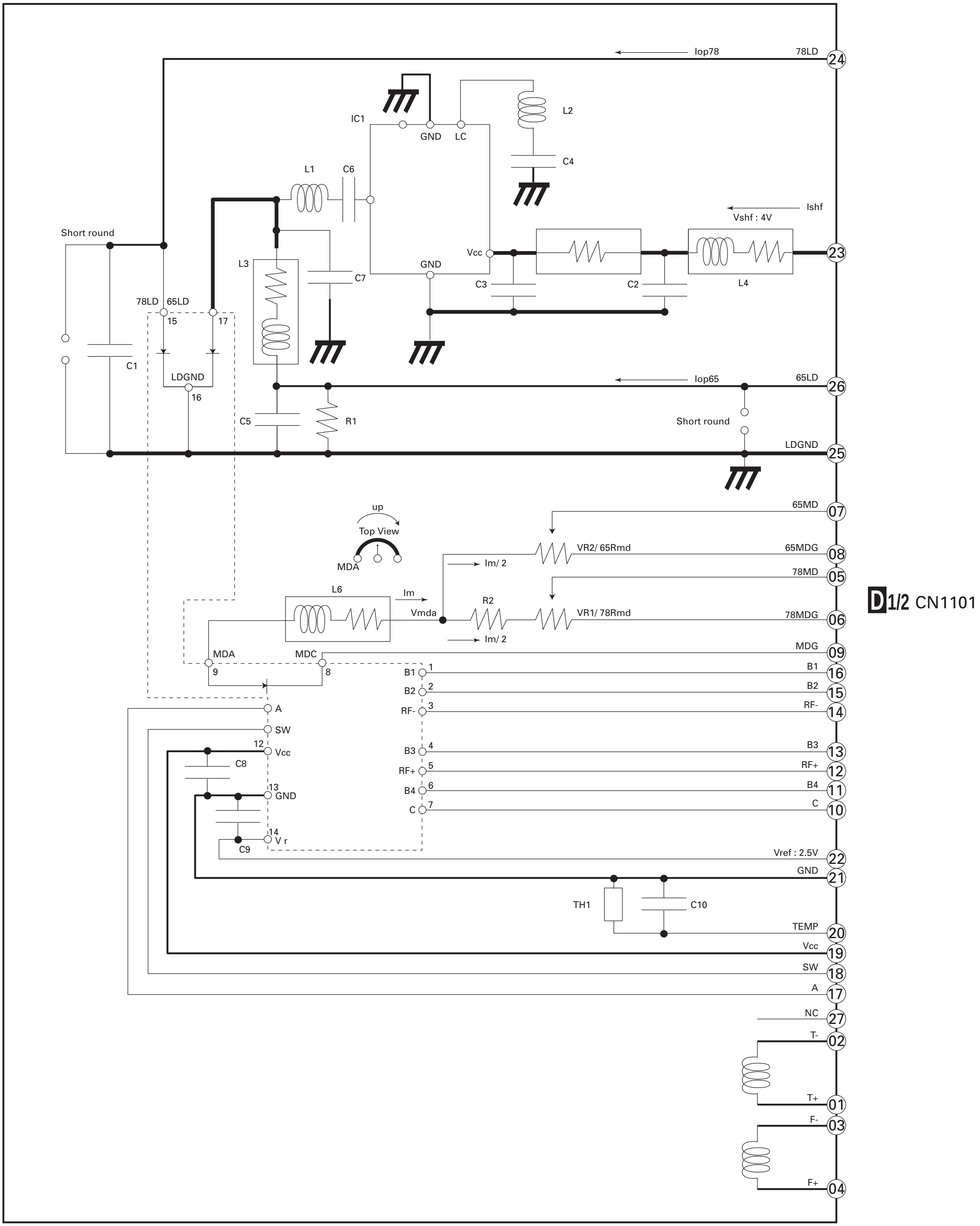
E COMPOUND UNIT(A)


D1/2
CN1202
6
5
4
3
2
1
R1298
0R0
Q1299
CPT231SCTD
R1299
0R0
8cm
CSN1052
S1905
DISC SENS
CSN1051
S1903
DISC SENS
CSN1052
8cm
CSN1051
S1902
12cm
CSN1051
S1901

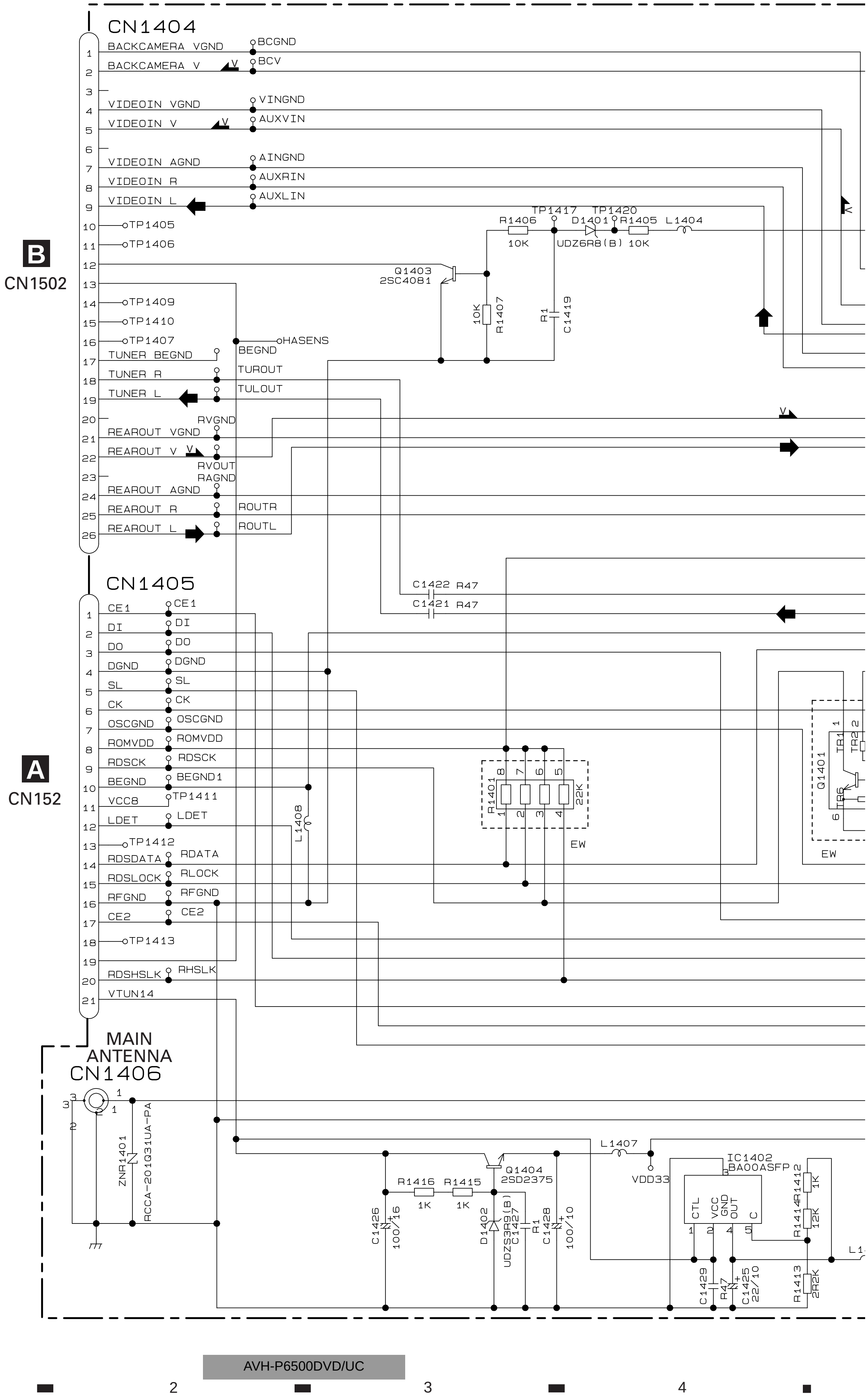
F COMPOUND UNIT(B)

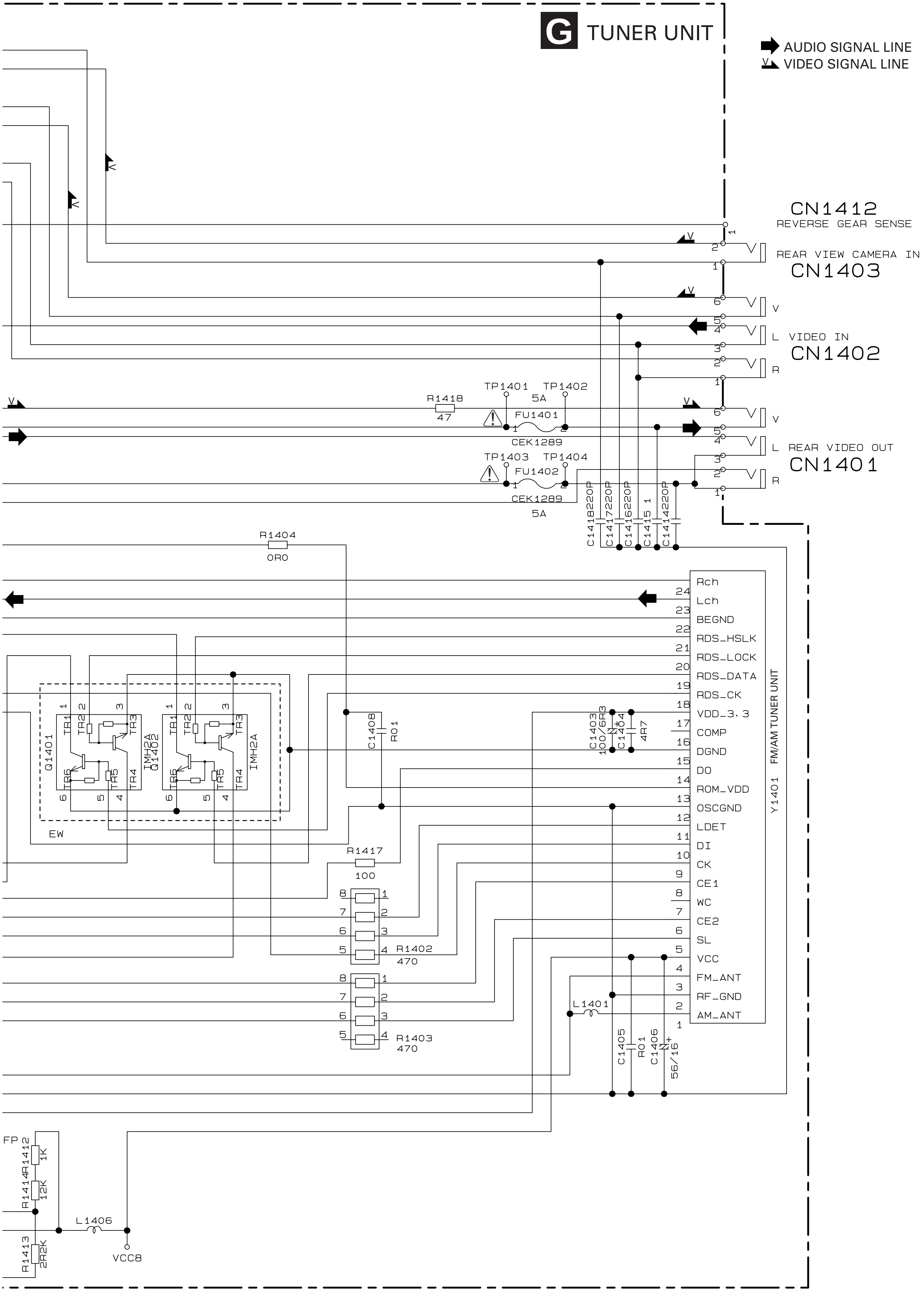

CLAMP
CSN1051
S1206
TP1
TESTPOINT
TP2
D1/2

3.9 PU UNIT(REFERENCE)

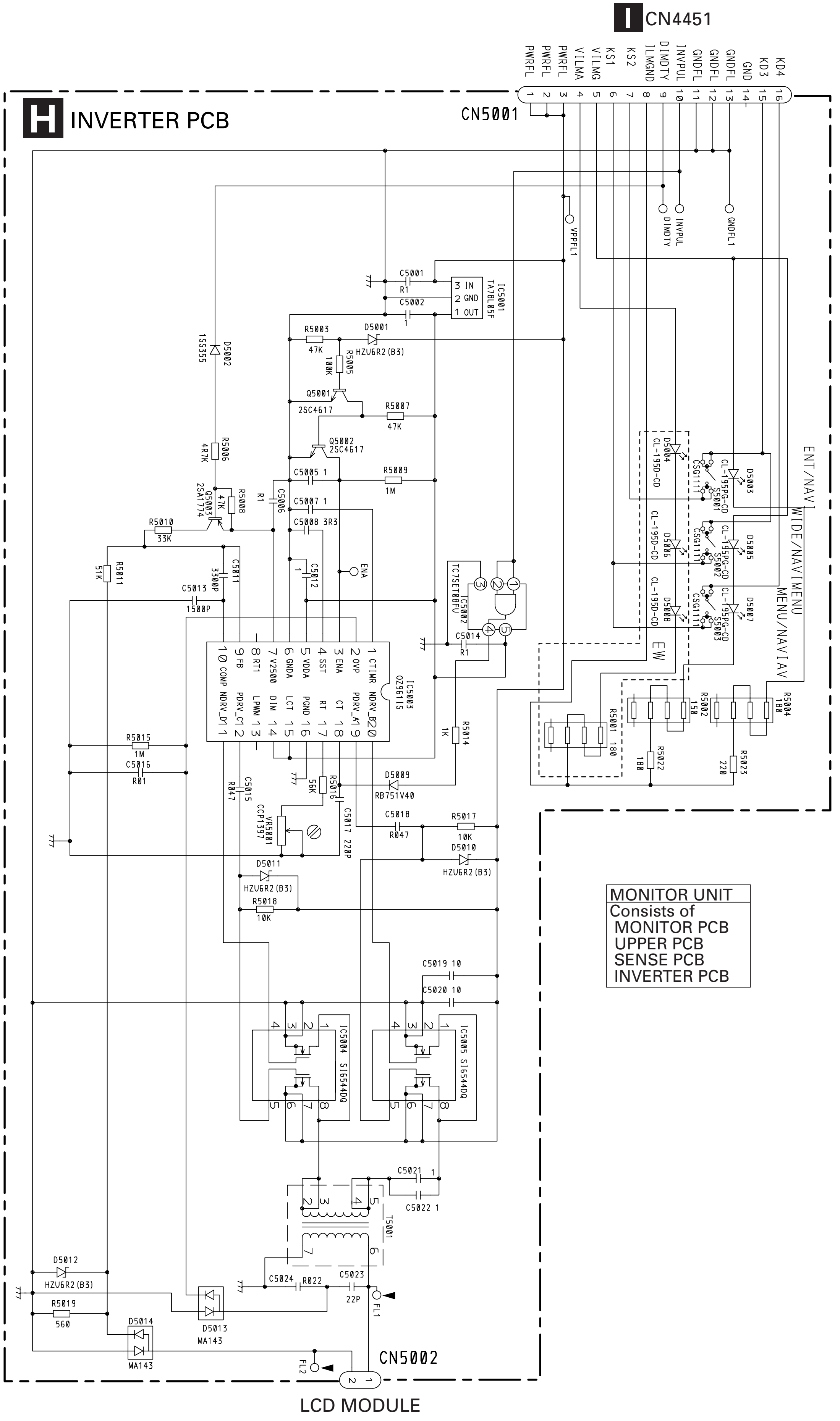

Iop78
78LD
24
IC1
GND
LC
L2
C4
L1
C6
Ishf
Vshf : 4V
Short round
Vcc
GND
L3
C7
C3
C2
L4
23
78LD
65LD
15
17
C1
LDGND
16
Iop65
65LD
26
C5
R1
Short round
LDGND
25
65MD
07
up
Top View
MDA
VR2/ 65Rmd
65MDG
08
Im/ 2
78MD
05
L6
Im
Vmda
R2
VR1/ 78Rmd
78MDG
06
Im/ 2
D1/2 CN1101
MDA
MDC
MDG
09
9
8
B1
1
B1
16
B2
2
B2
15
A
RF-
3
RF-
14
SW
12
Vcc
B3
4
B3
13
C8
RF+
5
RF+
12
13
GND
B4
6
B4
11
C
7
C
10
14
V r
C9
Vref : 2.5V
22
GND
21
TH1
C10
TEMP
20
Vcc
19
SW
18
A
17
NC
27
T-
02
T+
01
F-
03
F+
04

3.10 TUNER UNIT


CN1404
BACKCAMERA VGND
BCGND
BACKCAMERA V
BCV
VIDEOIN VGND
VINGND
VIDEOIN V
AUXVIN
VIDEOIN AGND
AINGND
VIDEOIN R
AUXRIN
VIDEOIN L
AUXLIN
TP1405
TP1406
TP1409
TP1410
TP1407
HASENS
TUNER BEGND
BEGND
TUNER R
TUROUT
TUNER L
TULOUT
RVGND
REAROUT VGND
REAROUT V
RVOUT
RAGND
REAROUT AGND
REAROUT R
ROUTR
REAROUT L
ROUTL
B
CN1502
TP1417
TP1420
R1406
10K
D1401
UDZ6R8(B)
R1405
10K
L1404
Q1403
2SC4081
10K
R1407
R1
C1419
CN1405
CE1
DI
DO
DGND
SL
CK
OSCGND
ROMVDD
RDSCK
BEGND
BEGND1
VCC8
TP1411
LDET
TP1412
RDSDATA
RDATA
RDSLOCK
RLOCK
RFGND
CE2
TP1413
RDSHSLK
RHSLK
VTUN14
A
CN152
C1422 R47
C1421 R47
L1408
R1401
22K
EW
Q1401
TR1
TR2
TR6
MAIN ANTENNA
CN1406
ZNR1401
RCCA-201Q31UA-PA
L1407
VDD33
Q1404
2SD2375
R1416
1K
R1415
1K
C1426
100/16
D1402
UDZS3R9(B)
C1427
R1
C1428
100/10
IC1402
BA00ASFP
CTL
VCC
GND
OUT
C
R1412
1K
R1414
12K
C1429
R47
C1425
22/10
R1413
2R2K


G TUNER UNIT
AUDIO SIGNAL LINE
VIDEO SIGNAL LINE
CN1412
REVERSE GEAR SENSE
REAR VIEW CAMERA IN
CN1403
V
L VIDEO IN
CN1402
R
V
L REAR VIDEO OUT
CN1401
R
R1418
47
TP1401
TP1402
5A
FU1401
CEK1289
TP1403
TP1404
FU1402
CEK1289
5A
C1418 220P
C1417 220P
C1416 220P
C1415 1
C1414 220P
R1404
0R0
Rch
Lch
BEGND
RDS_HSLK
RDS_LOCK
RDS_DATA
RDS_CK
VDD_3.3
COMP
DGND
DO
ROM_VDD
OSCGND
LDET
DI
CK
CE1
WC
CE2
SL
VCC
FM_ANT
RF_GND
AM_ANT
Y1401 FM/AM TUNER UNIT
Q1401
IMH2A
Q1402
IMH2A
TR1
TR2
TR3
TR4
TR5
TR6
EW
C1408
R01
C1403
100/6R3
C1404
4R7
R1417
100
R1402
470
R1403
470
L1401
C1405
R01
C1406
56/16
FP
R1412
1K
R1414
12K
R1413
2R2K
L1406
VCC8

3.11 INVERTER PCB

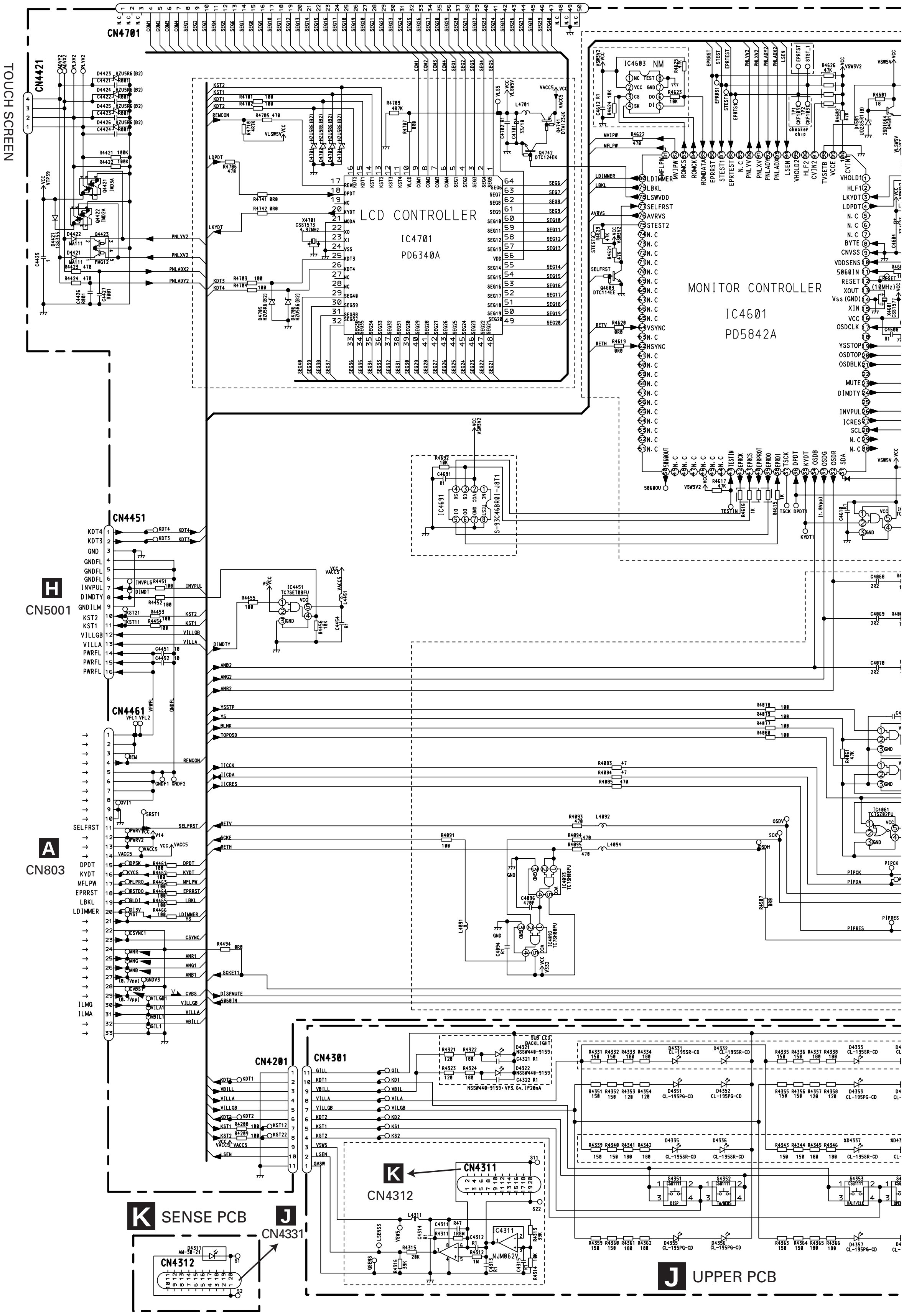

I CN4451
PWRFL 1
PWRFL 2
PWRFL 3
VILMA 4
VILMG 5
KS1 6
KS2 7
ILMGND 8
DIMDTY 9
INVPUL 10
GNDFL 11
GNDFL 12
GNDFL 13
GND 14
KD3 15
KD4 16
H INVERTER PCB
CN5001
VPPFL1
DIMDTY
INVPUL
GNDFL1
C5001 R1
C5002 1
IC5001 TA78L05F
3 IN
2 GND
1 OUT
R5003 47K
D5001 HZU6R2(B3)
R5005 100K
Q5001 2SC4617
R5007 47K
Q5002 2SC4617
D5002 1SS355
R5006 4R7K
R5008 47K
Q5003 2SA1774
R5010 33K
R5011 51K
C5006 R1
C5005 1
R5009 1M
C5007 1
C5008 3R3
C5012 1
C5011 3300P
C5013 1500P
ENA
IC5002 TC7SET08FU
C5014 R1
IC5003 OZ9611S
1 CTIMR
2 OVP
3 ENA
4 SST
5 VDDA
6 GNDA
7 V2500
8 RT1
9 FB
10 COMP
11 NDRV_D1
12 PDRV_C1
13 LPWM
14 DIM
15 LCT
16 PGND
17 RT
18 CT
19 PDRV_A1
20 NDRV_B2
R5014 1K
R5015 1M
C5016 R01
C5015 R047
R5016 56K
D5009 RB751V40
VR5001 CCP1397
C5017 220P
C5018 R047
R5017 10K
D5010 HZU6R2(B3)
D5011 HZU6R2(B3)
R5018 10K
C5019 10
C5020 10
IC5004 SI6544DQ
IC5005 SI6544DQ
C5021 1
C5022 1
T5001
C5024 R022
C5023 22P
FL1
D5012 HZU6R2(B3)
R5019 560
D5013 MA143
D5014 MA143
FL2
CN5002
LCD MODULE
D5004 CL-195D-CD
D5006 CL-195D-CD
D5008 CL-195D-CD
D5003 CL-195PG-CD
D5005 CL-195PG-CD
D5007 CL-195PG-CD
S5001 CSG1111
S5002 CSG1111
S5003 CSG1111
ENT/NAV
WIDE/NAVIMENU
MENU/NAVIAV
EW
R5001 180
R5002 150
R5004 180
R5022 180
R5023 220

MONITOR UNIT
Consists of
MONITOR PCB
UPPER PCB
SENSE PCB
INVERTER PCB

3.12 MONITOR PCB,UPPER PCB AND SENSE PCB(GUIDE PAGE)

I-a

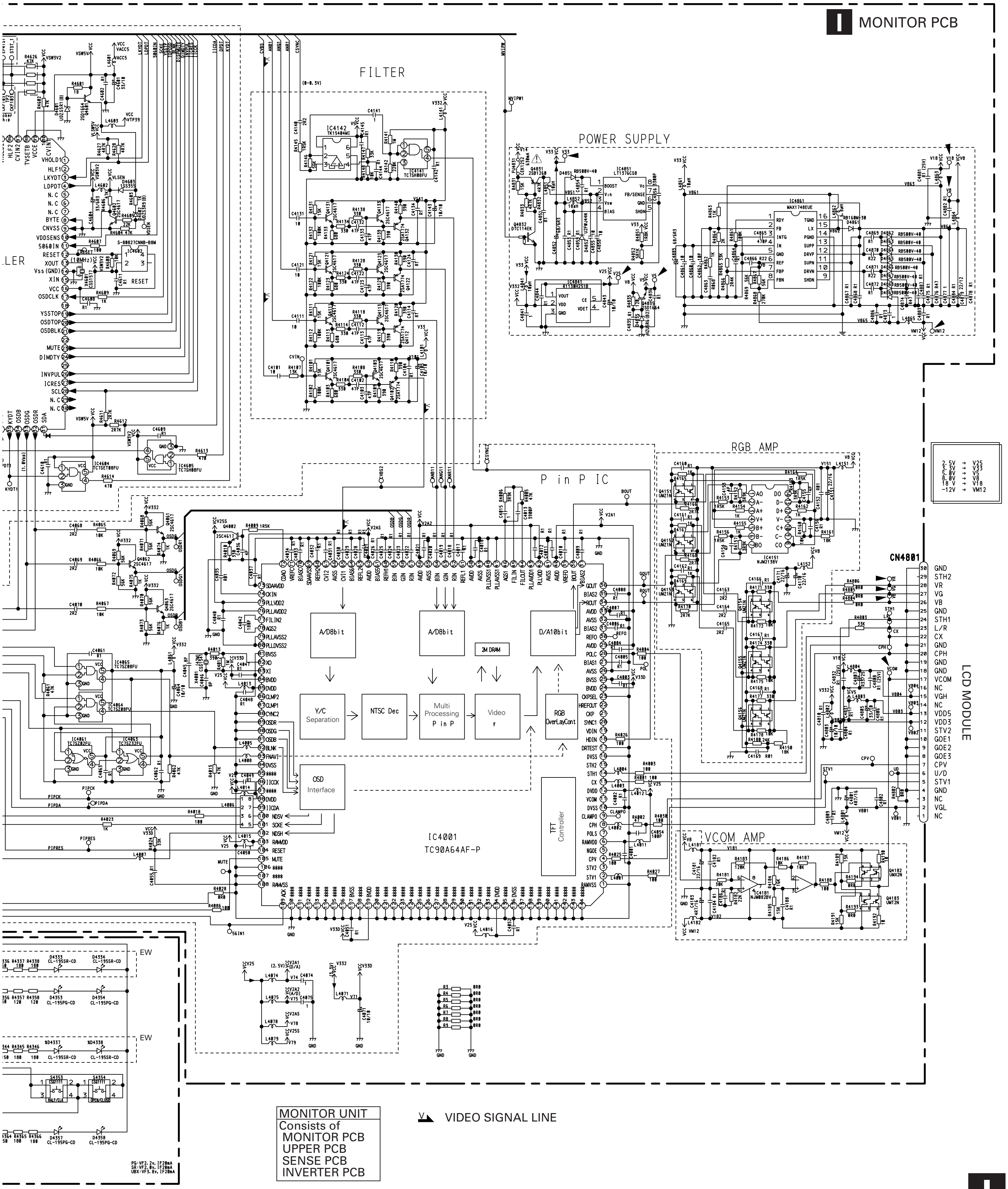
SUB DISPLAY


CN4701
CN4421
TOUCH SCREEN
LCD CONTROLLER
IC4701
PD6340A
MONITOR CONTROLLER
IC4601
PD5842A
IC4603 NM
IC4691
S-93C46BR01-J8T1
CN4451
H
CN5001
IC4451
TC7SET08FU
CN4461
A
CN803
IC4861
CN4201
CN4301
CN4311
K
CN4312
K SENSE PCB
J
CN4331
IC4311
NJM062V
J UPPER PCB
KDT4
KDT3
GND
GNDFL
INVPUL
DIMDTY
GNDILM
KST2
KST1
VILLGB
VILLA
PWRFL
SELFRST
DPDT
KYDT
MFLPW
EPRRST
LBKL
LDIMMER
ILMG
ILMA
SUB LCD BACKLIGHT

A B C D E F

I J K

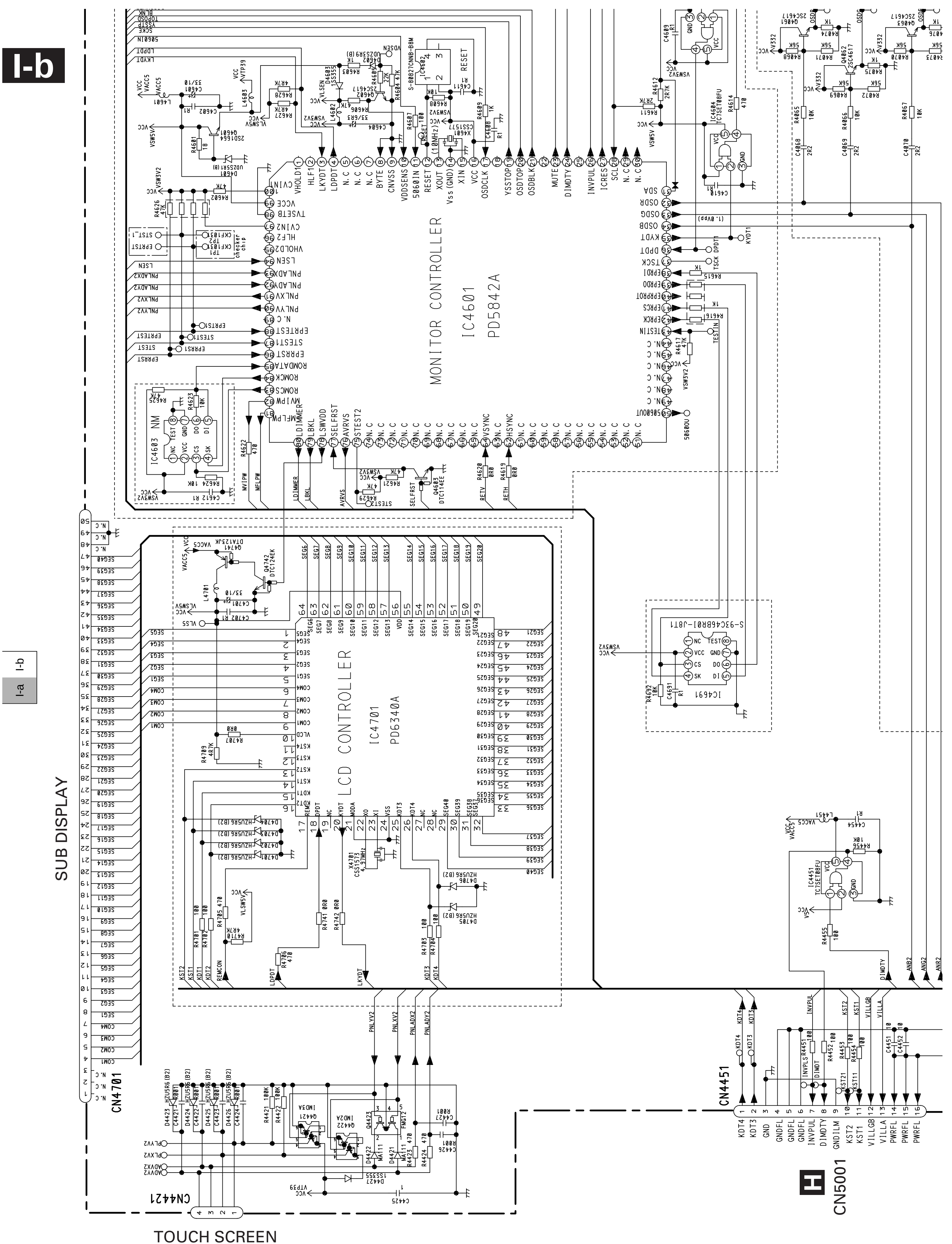
I-b


I MONITOR PCB
FILTER
IC4142 TK15404MI
IC4141 TC7SH08FU
POWER SUPPLY
IC4851 LT1376CS8
IC4861 MAX1748EUE
IC4841 R1150H251B
RGB AMP
IC4151 NJM2138V
P in P IC
IC4001 TC90A64AF-P
A/D8bit
A/D8bit
D/A10bit
2M DRAM
Y/C Separation
NTSC Dec
Multi Processing P in P
Video γ
RGB OverLayCont
OSD Interface
TFT Controller
VCOM AMP
IC4181 NJM082BV
CN4801
LCD MODULE
GND
STH2
VR
VG
VB
GND
STH1
L/R
CX
GND
CPH
GND
GND
VCOM
NC
VGH
NC
VDD5
VDD3
STV2
GOE1
GOE2
GOE3
CPV
U/D
STV1
GND
NC
VGL
NC
2.5V → V25
3.3V → V33
5 V → V5
8 V → V8
18 V → V18
−12V → VM12
VHOLD1
HLF1
LKYDT
LDPDT
N.C
N.C
N.C
BYTE
CNVSS
VDDSENS
5060IN
RESET
XOUT
Vss (GND)
XIN
VCC
OSDCLK
YSSTOP
OSDTOP
OSDBLK
MUTE
DIMDTY
INVPUL
ICRES
SCL
N.C
N.C
IC4604 TC7SET08FU
IC4605 TC7SH08FU
IC4865 TC7SZ08FU
IC4864 TC7SZ08FU
IC4861 TC7SZ32FU
IC4863 TC7SZ32FU
S-80827CNNB-B8M
EW
EW
PG:VF2.2v, IF20mA
SR:VF2.0v, IF20mA
UBX:VF3.8v, IF20mA

MONITOR UNIT
Consists of
MONITOR PCB
UPPER PCB
SENSE PCB
INVERTER PCB

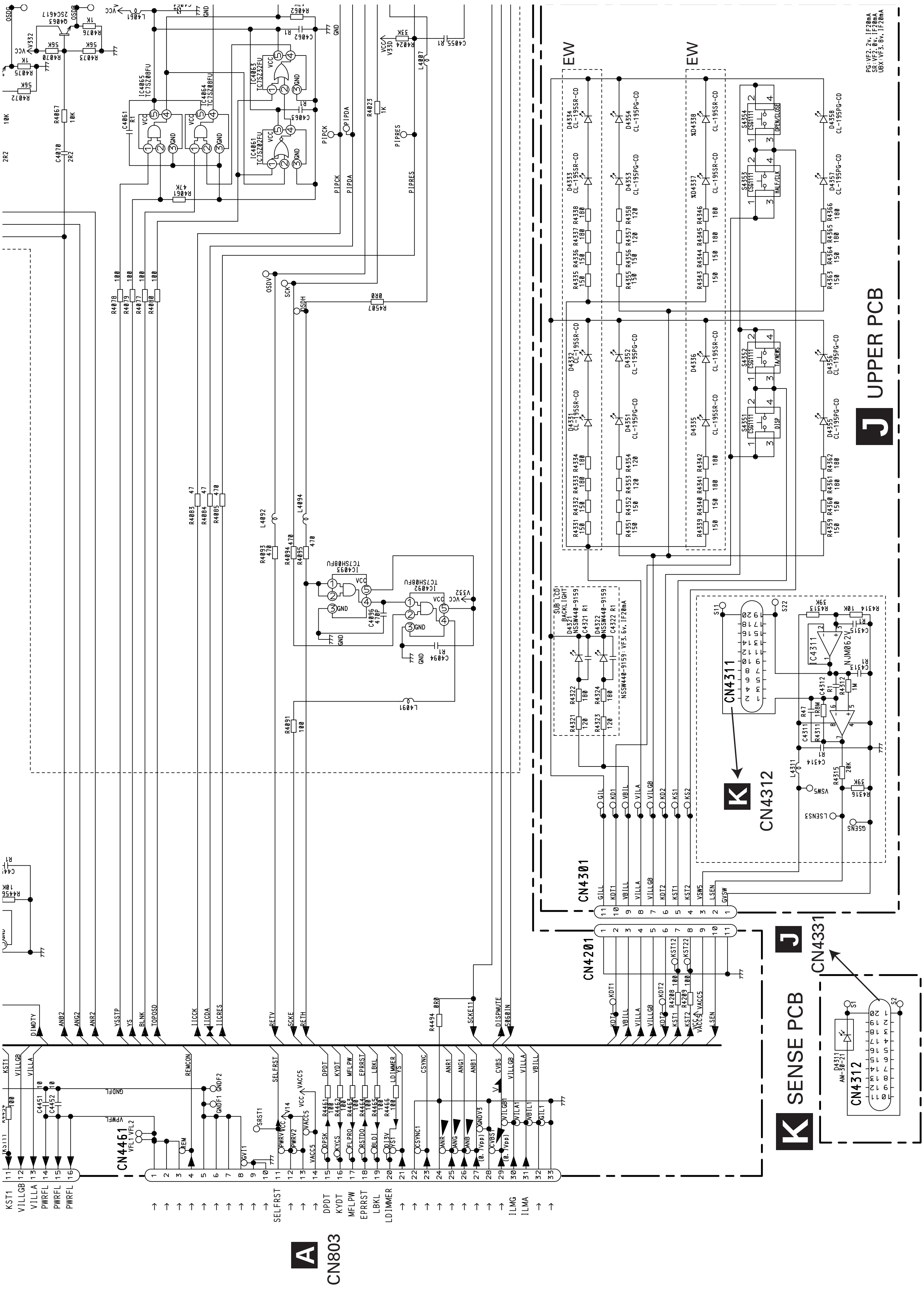
V VIDEO SIGNAL LINE

I-b


MONITOR CONTROLLER
IC4601
PD5842A
LCD CONTROLLER
IC4701
PD6340A
IC4603 NM
S-93C46BR0I-J8T1
IC4691
IC4604 TC7SET08FU
IC4451 TC7SET08FU
S-80827CNNB-B8M
CN4701
SUB DISPLAY
CN4421
TOUCH SCREEN
CN4451
H
CN5001
KDT4
KDT3
GND
GNDFL
GNDFL
GNDFL
INVPUL
DIMDTY
GNDILM
KST2
KST1
VILLGB
VILLA
PWRFL
PWRFL
PWRFL
PLYV2
PLXV2
ADVX2
ADVY2
VTP39
VCC
I-a
I-b
A
B
C
D
E
F

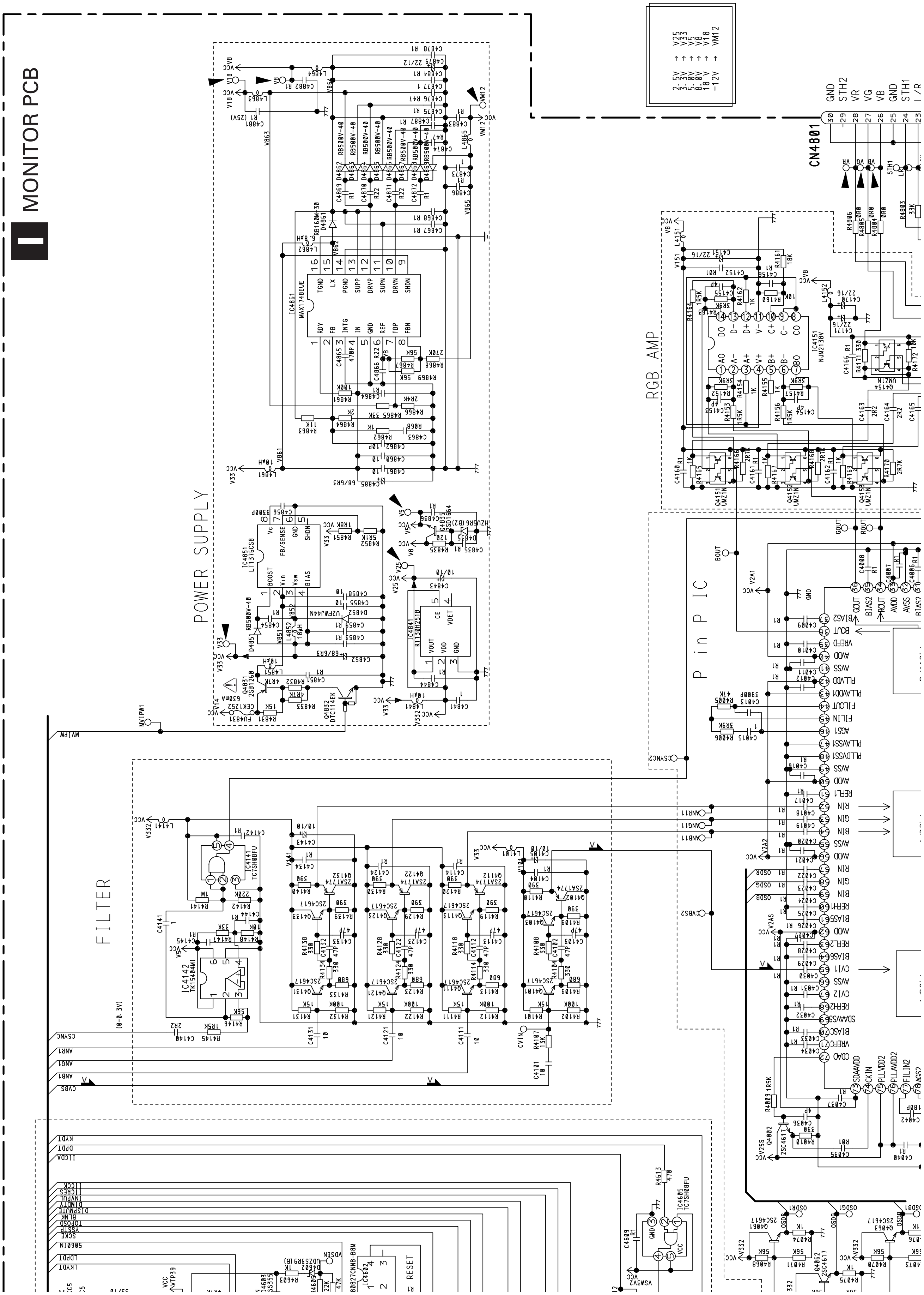
I-a

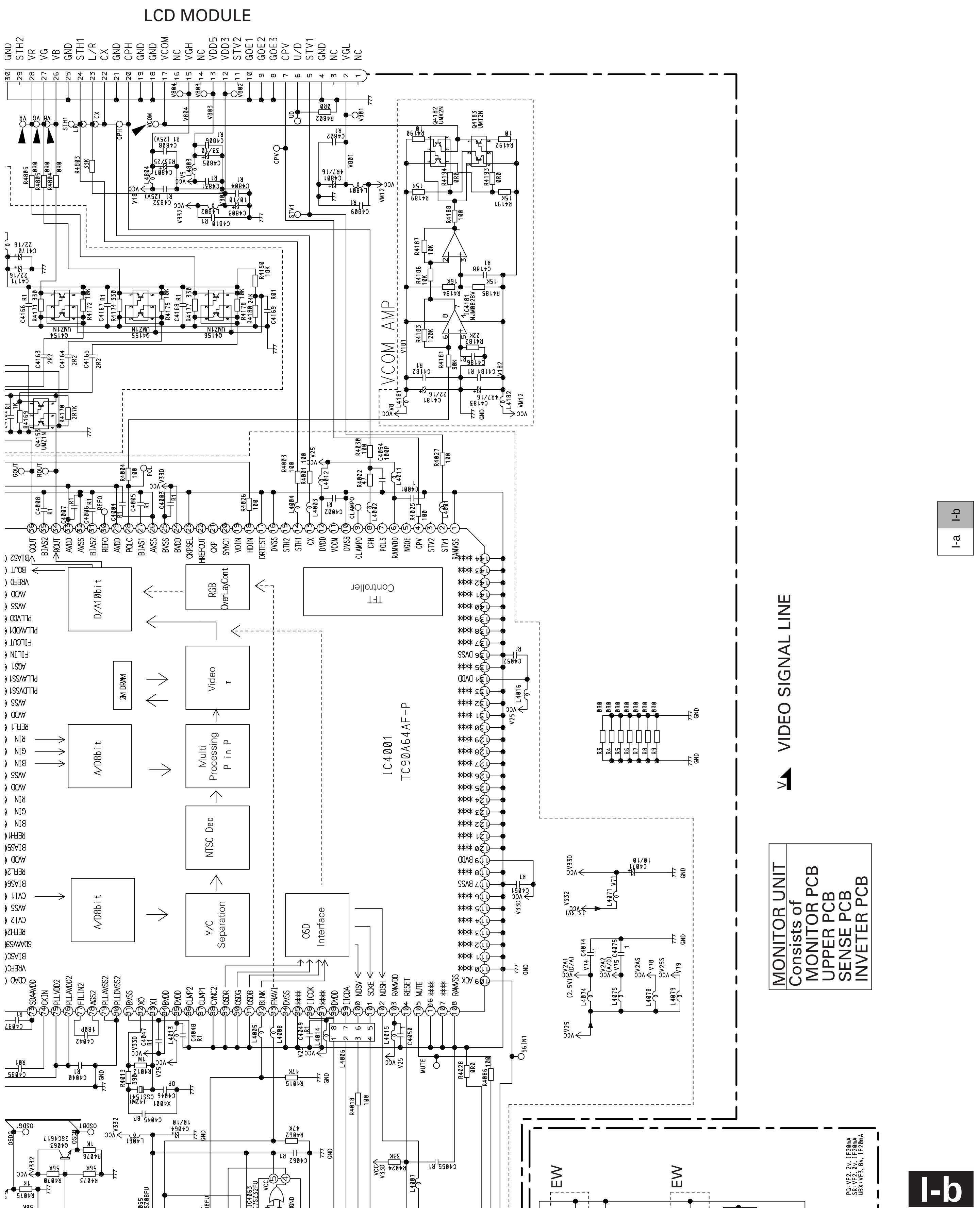
I-b


J
UPPER PCB
K
SENSE PCB
A
CN803
CN4301
CN4201
CN4461
CN4331
CN4312
CN4311
EW
IC4061 TC7SZ08FU
IC4062 TC7SZ32FU
IC4063 TC7SZ32FU
IC4064 TC7SZ08FU
IC4065 TC7SZ08FU
IC4092 TC7SH08FU
IC4093 TC7SH08FU
Q4063 2SC4617
IC4311 NJM062V
D4331 CL-195SR-CD
D4332 CL-195SR-CD
D4333 CL-195SR-CD
D4334 CL-195SR-CD
D4335
D4336
D4351 CL-195PG-CD
D4352 CL-195PG-CD
D4353 CL-195PG-CD
D4354 CL-195PG-CD
D4355 CL-195PG-CD
D4356 CL-195PG-CD
D4357 CL-195PG-CD
D4358 CL-195PG-CD
D4321 NSSW440-9159
D4322 NSSW440-9159
S4351 CSG1111 DISP
S4352 CSG1111 TA/NEWS
S4353 CSG1111 HALF/CLK
S4354 CSG1111 OPEN/CLOSE
SUB LCD BACKLIGHT
NSSW440-9159: VF3.6V, IF20mA
PG:VF2.2V, IF20mA
SR:VF2.0V, IF20mA
UBX:VF3.8V, IF20mA
D4311 AM-30-21
GILL KDT1 VBILL VILLA VILLGB KDT2 KST1 KST2 VSWS LSEN GVSW
KST1 VILLGB VILLA PWRFL PWRFL PWRFL
SELFRST DPDT KYDT MFLPW EPRRST LBKL LDIMMER ILMG ILMA
DIMDTY ANR2 ANG2 ANR2 VSSTP VS BLNK TOPOSD IICCK IICDA IICRES RETV SCKE RETH SCKE11 DISPMUTE SB60IN
REMCON GNDFL VPWFL SRST1 VACC5 CSYNC ANR1 ANG1 ANB1 CVBS VILLGB VILLA VBILL
PIPCK PIPDA PIPRES OSDV SCK OSDH
LSENS3 VSWS GSENS S11 S22 S1 S2

I-a **I-b**

I-a **J** **K**


I
MONITOR PCB
POWER SUPPLY
RGB AMP
P in P IC
FILTER
CN4801
IC4861 MAX1748EUE
IC4851 LT1316CS8
IC4841 R1130H251B
IC4151 NJM2138V
IC4141 TC7SH08FU
IC4142 TK15404MI
IC4605 TC7SH08FU
Q4831 2SB1260
Q4832 DTC114EK
Q4151 UMZ1N
Q4152 UMZ1N
Q4153 UMZ1N
Q4154 UMZ1N
Q4002 2SC4617
2.5V → V25
3.3V → V33
5.0V → V5
8.0V → V8
18 V → V18
−12V → VM12
GND
STH2
VR
VG
VB
GND
STH1
L/R
MVIPW
CSYNC
ANR1
ANG1
ANB1
CVBS
KVDT
DPDT
IICDA
IICCK
IICRES
DYNPUL
DIMDTY
DISPMUTE
BLNK
TOPOSD
VSSTP
SCKE
SOGOIN
LDPDT
LKVDT
RESET
BIAS2
BOUT
VREFD
AVDD
AVSS
PLLVDD1
PLLAVDD1
FILOUT
FILIN
AGS1
PLLAVSS1
PLLDVSS1
REFL1
RIN
GIN
BIN
REFH1
BIASS1
REFL2
BIAS6
CVI1
CVI2
REFH2
SDAAVSS
VREFC
CDAO
SDAAVDD
CKIN
PLLAVDD2
FILIN2
GOUT
ROUT
CSYNC2
CVBS2
ANR11
ANG11
ANB11
OSDR
OSDG
OSDB

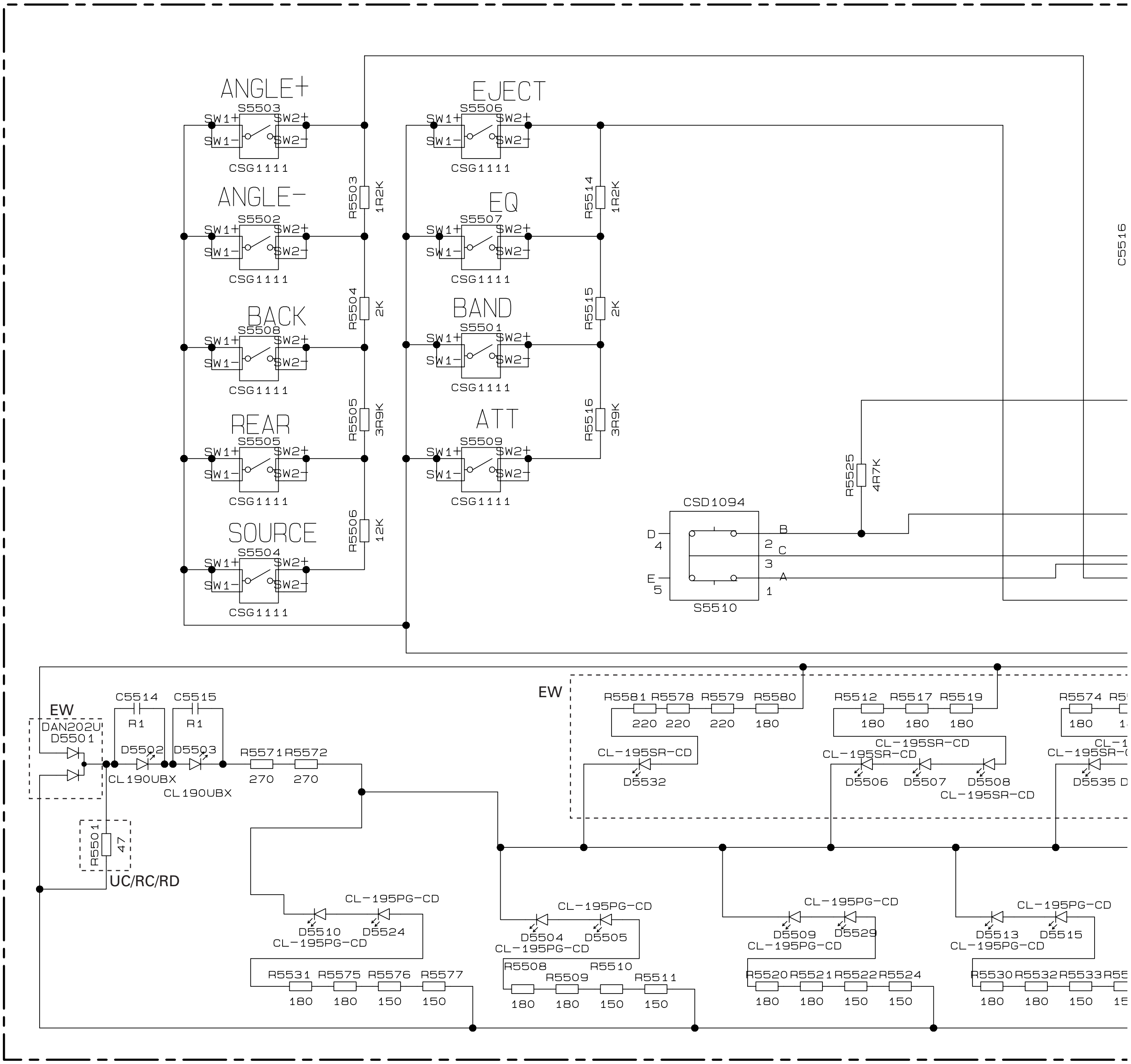


5
6
7
8
A
B
C
D
E
F
LCD MODULE
GND STH2 VR VG VB GND STH1 L/R CX GND CPH GND GND VCOM NC VGH NC VDD5 VDD3 STV2 GOE1 GOE2 GOE3 CPV U/D STV1 GND NC VGL NC
VCOM AMP
IC4181 NJM082BV
Q4182 UMX2N
Q4183 UMT2N
Q4154 UMZ1N
Q4155 UMZ1N
Q4156 UMZ1N
Q4158 UMZ1N
IC4001
TC90A64AF-P
D/A10bit
RGB OverLayCont
TFT Controller
2M DRAM
Video r
A/D8bit
Multi Processing P in P
NTSC Dec
A/D8bit
Y/C Separation
OSD Interface
X4001 CSS1542
VIDEO SIGNAL LINE
MONITOR UNIT
Consists of
MONITOR PCB
UPPER PCB
SENSE PCB
INVETER PCB
EW
EW
I-a
I-b

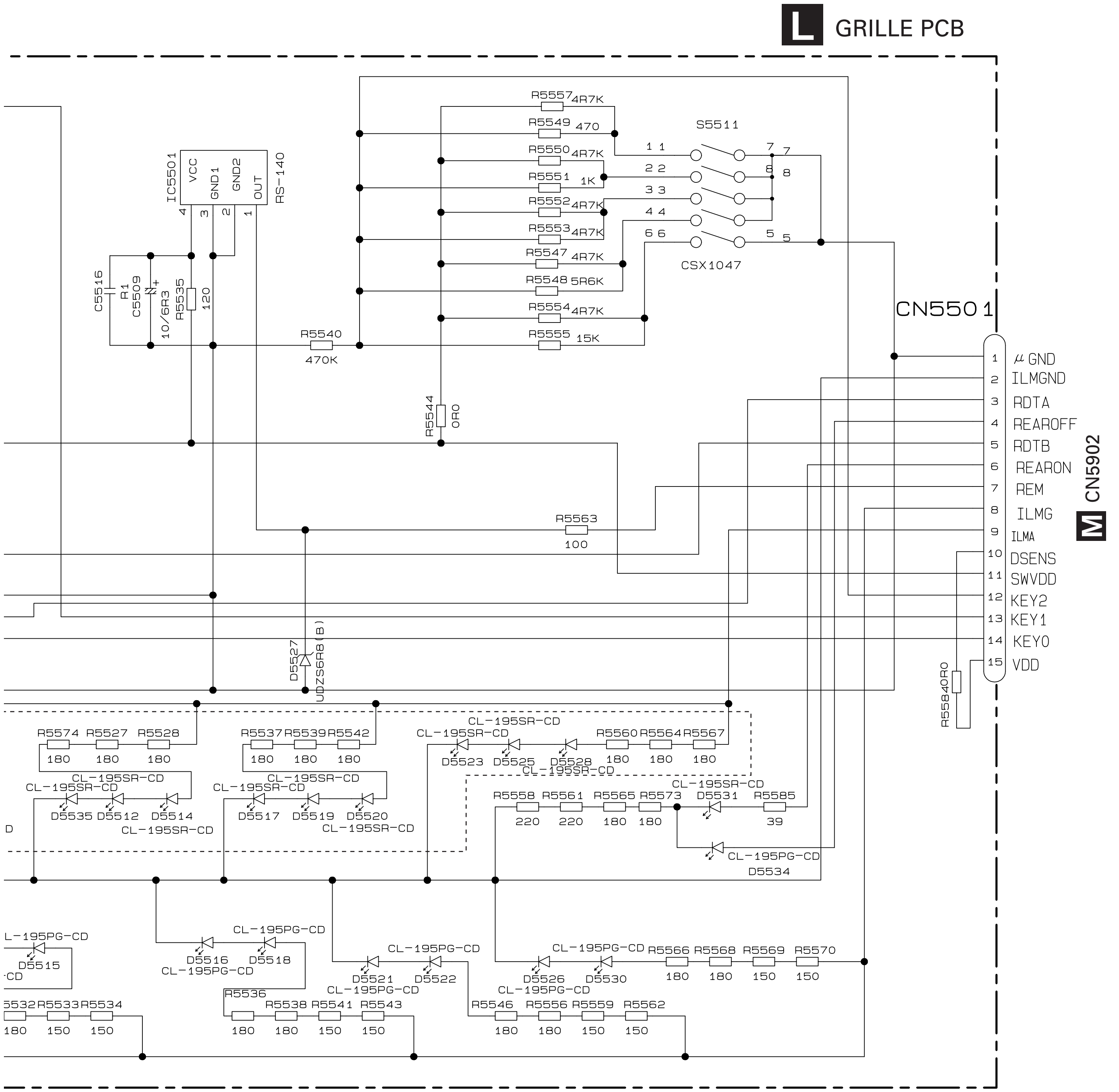
I-b

3.13 GRILLE PCB

A
B
C
D
E
F


ANGLE+
S5503
SW1+
SW1−
SW2+
SW2−
CSG1111
ANGLE−
S5502
BACK
S5508
REAR
S5505
SOURCE
S5504
R5503
1R2K
R5504
2K
R5505
3R9K
R5506
12K
EJECT
S5506
EQ
S5507
BAND
S5501
ATT
S5509
R5514
1R2K
R5515
2K
R5516
3R9K
C5516
R5525
4R7K
CSD1094
S5510
D
4
E
5
B
2
C
3
A
1
EW
DAN202U
D5501
C5514
R1
C5515
R1
D5502
D5503
CL190UBX
CL190UBX
R5571
R5572
270
270
R5501
47
UC/RC/RD
EW
R5581
R5578
R5579
R5580
220
220
220
180
CL−195SR−CD
D5532
R5512
R5517
R5519
180
180
180
CL−195SR−CD
CL−195SR−CD
D5506
D5507
D5508
CL−195SR−CD
R5574
180
CL−195SR−CD
D5535
CL−195PG−CD
D5510
D5524
CL−195PG−CD
R5531
R5575
R5576
R5577
180
180
150
150
CL−195PG−CD
D5504
D5505
CL−195PG−CD
R5508
R5509
R5510
R5511
180
180
150
150
CL−195PG−CD
D5509
D5529
CL−195PG−CD
R5520
R5521
R5522
R5524
180
180
150
150
CL−195PG−CD
D5513
D5515
CL−195PG−CD
R5530
R5532
R5533
180
180
150

L


L GRILLE PCB
IC5501
RS-140
VCC
GND1
GND2
OUT
4
3
2
1
C5516
R1
C5509
10/6R3
R5535
120
R5540
470K
R5557 4R7K
R5549 470
R5550 4R7K
R5551 1K
R5552 4R7K
R5553 4R7K
R5547 4R7K
R5548 5R6K
R5554 4R7K
R5555 15K
R5544
0R0
S5511
CSX1047
CN5501
µGND
ILMGND
RDTA
REAROFF
RDTB
REARON
REM
ILMG
ILMA
DSENS
SWVDD
KEY2
KEY1
KEY0
VDD
M CN5902
R5584 0R0
R5563
100
D5527
UDZS6R8(B)
R5574 R5527 R5528
180 180 180
R5537 R5539 R5542
180 180 180
R5560 R5564 R5567
180 180 180
CL-195SR-CD
D5535 D5512 D5514
D5517 D5519 D5520
D5523 D5525 D5528
R5558 R5561 R5565 R5573
220 220 180 180
D5531
R5585
39
CL-195PG-CD
D5534
D5515
D5516 D5518
D5521 D5522
D5526 D5530
R5566 R5568 R5569 R5570
180 180 150 150
R5532 R5533 R5534
180 150 150
R5536
R5538 R5541 R5543
180 180 150 150
R5546 R5556 R5559 R5562
180 180 150 150

A

B

C

D

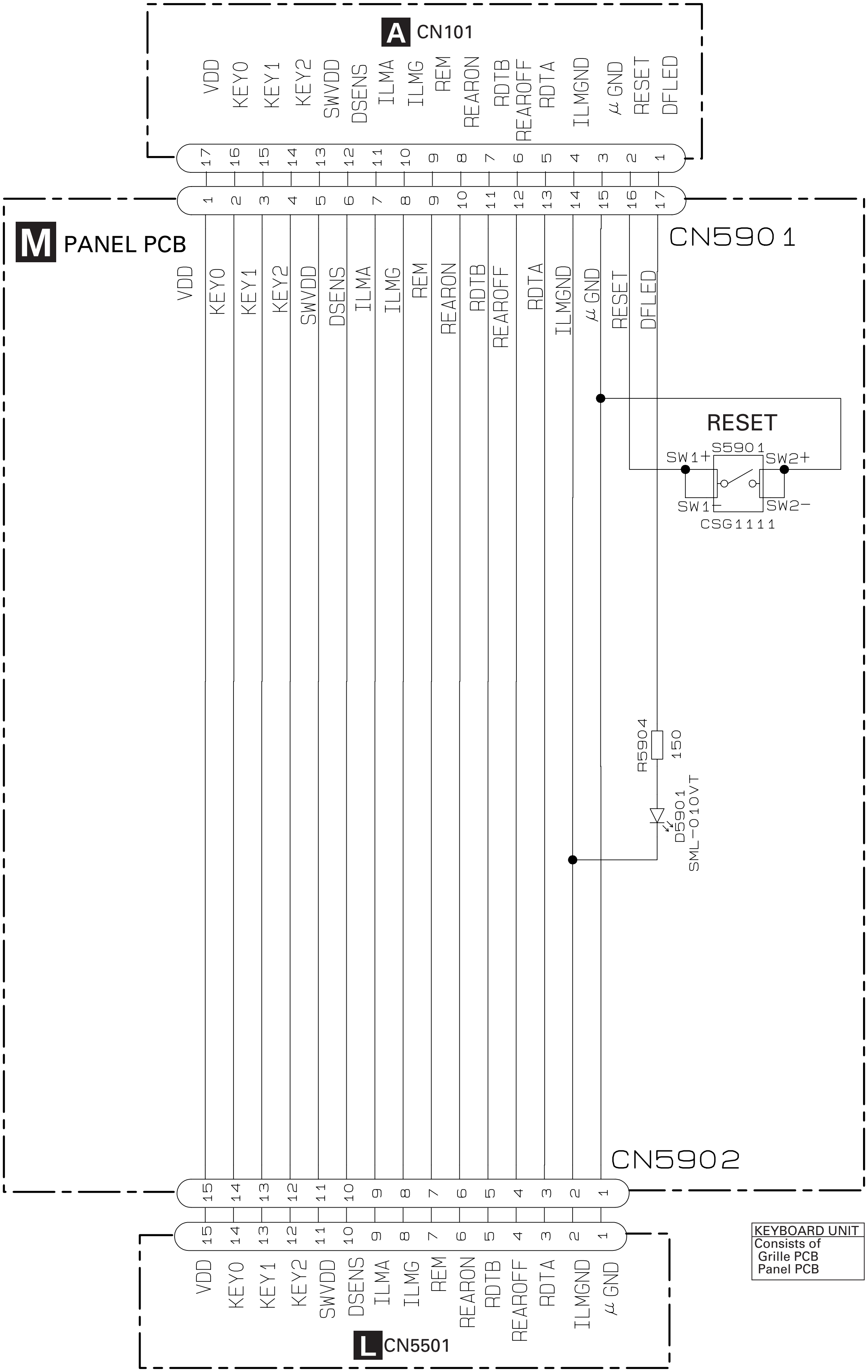
E

F

KEYBOARD UNIT
Consists of Grille PCB Panel PCB

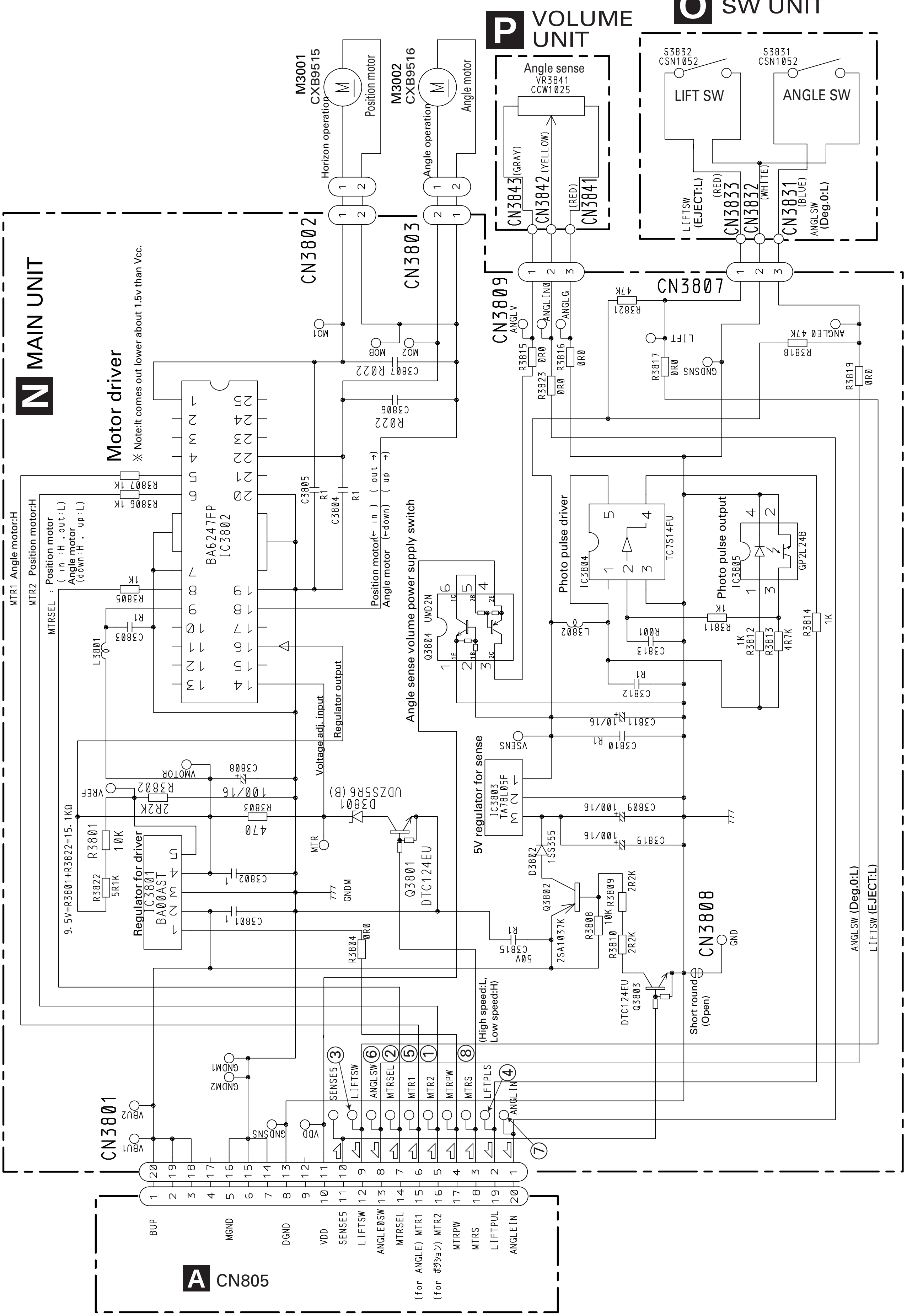
L

3.14 PANEL PCB


A CN101
VDD
KEY0
KEY1
KEY2
SWVDD
DSENS
ILMA
ILMG
REM
REARON
RDTB
REAROFF
RDTA
ILMGND
μ GND
RESET
DFLED
M PANEL PCB
CN5901
RESET
S5901
SW1+
SW2+
SW1−
SW2−
CSG1111
R5904
150
D5901
SML-010VT
CN5902
L CN5501

KEYBOARD UNIT
Consists of
Grille PCB
Panel PCB

3.15 MAIN UNIT,SW UNIT AND VOLUME UNIT

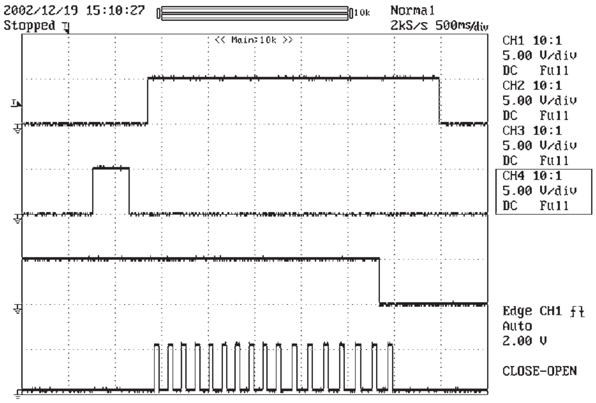

P VOLUME UNIT
O SW UNIT
N MAIN UNIT
Motor driver
※ Note:It comes out lower about 1.5v than Vcc.
M3001 CXB9515 Horizon operation Position motor
M3002 CXB9516 Angle operation Angle motor
Angle sense VR3841 CCW1025
S3832 CSN1052 LIFT SW
S3831 CSN1052 ANGLE SW
CN3843 (GRAY)
CN3842 (YELLOW)
CN3841 (RED)
CN3833 (RED) LIFTSW (EJECT:L)
CN3832 (WHITE)
CN3831 (BLUE) ANGLSW (Deg.0:L)
CN3802
CN3803
CN3809
CN3807
CN3808
CN3801
BA6247FP IC3802
Photo pulse driver
IC3804 TC7S14FU
Photo pulse output
IC3805 GP2L24B
Angle sense volume power supply switch
Q3804 UMD2N
5V regulator for sense
IC3803 TA78L05F
Regulator for driver
IC3801 BA00AST
Q3801 DTC124EU
D3801 UDZS5R6(B)
Q3802 2SA1037K
D3802 1SS355
Q3803 DTC124EU
9.5V=R3801+R3822=15.1KΩ
MTR1 Angle motor:H
MTR2 Position motor:H
MTRSEL : Position motor (in :H , out:L) Angle motor (down:H , up:L)
Position motor(← in) (out →)
Angle motor (←down) (up →)
Voltage adj. input
Regulator output
(High speed:L, Low speed:H)
Short round (Open)
ANGLSW (Deg.0:L)
LIFTSW (EJECT:L)
VBU1
VBU2
GNDM1
GNDM2
GNDSNS
VDD
VREF
VMOTOR
VSENS
MTR
GNDM
GND
SENSE5 LIFTSW ANGLSW MTRSEL MTR1 MTR2 MTRPW MTRS LFTPLS ANGLIN
BUP MGND DGND VDD SENSE5 LIFTSW ANGLE0SW MTRSEL (for ANGLE) MTR1 (for ポジション) MTR2 MTRPW MTRS LIFTPUL ANGLEIN
A CN805

● Waveforms

The encircled number denote measuring pointes in the circuit diagram.

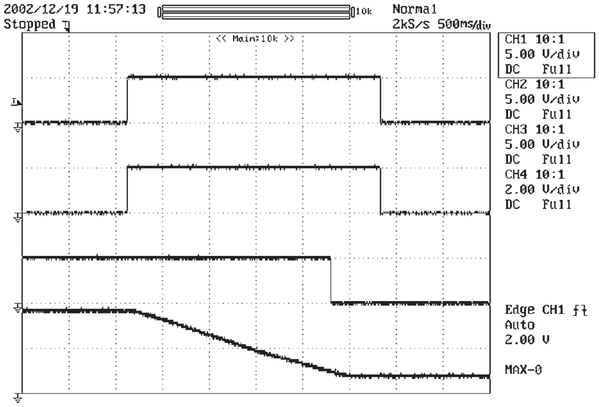
• CLOSE -> OPEN

① CH1:MTR2 ② CH2:MTRSEL
③ CH3:LIFTSW ④ CH4:LFTPLS


2002/12/19 15:10:27
Stopped
10k
Normal
2kS/s 500ms/div
<< Main:10k >>
CH1 10:1
5.00 V/div
DC Full
CH2 10:1
5.00 V/div
DC Full
CH3 10:1
5.00 V/div
DC Full
CH4 10:1
5.00 V/div
DC Full
Edge CH1 ↑
Auto
2.00 V
CLOSE-OPEN

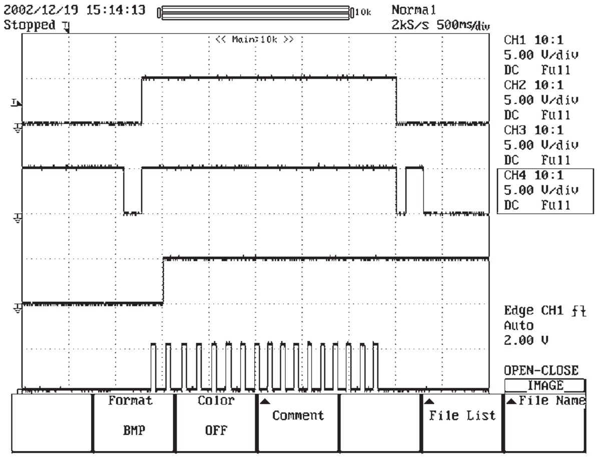
• MAX -> Deg.0 DOWN

⑤ CH1:MTR1 ② CH2:MTRSEL
⑥ CH3:ANGLSW ⑦ CH4:ANGLIN


2002/12/19 11:57:13
Stopped
10k
Normal
2kS/s 500ms/div
<< Main:10k >>
CH1 10:1
5.00 V/div
DC Full
CH2 10:1
5.00 V/div
DC Full
CH3 10:1
5.00 V/div
DC Full
CH4 10:1
2.00 V/div
DC Full
Edge CH1 ↑
Auto
2.00 V
MAX-0

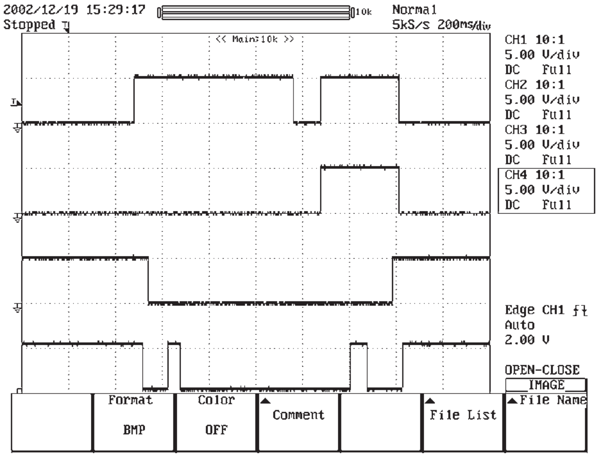
• OPEN -> CLOSE

① CH1:MTR2 ② CH2:MTRSEL
③ CH3:LIFTSW ④ CH4:LFTPLS


2002/12/19 15:14:13
Stopped
10k
Normal
2kS/s 500ms/div
<< Main:10k >>
CH1 10:1
5.00 V/div
DC Full
CH2 10:1
5.00 V/div
DC Full
CH3 10:1
5.00 V/div
DC Full
CH4 10:1
5.00 V/div
DC Full
Edge CH1 ↑
Auto
2.00 V
OPEN-CLOSE

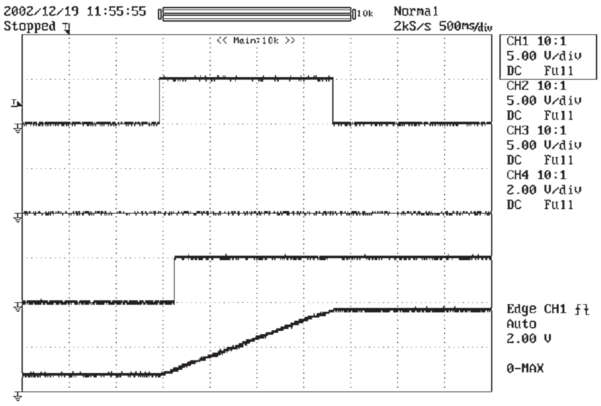
• Set back open -> Set

① CH1:MTR2 ⑧ CH2:MTRS
③ CH3:LIFTSW ④ CH4:LFTPLS


2002/12/19 15:29:17
Stopped
10k
Normal
5kS/s 200ms/div
<< Main:10k >>
CH1 10:1
5.00 V/div
DC Full
CH2 10:1
5.00 V/div
DC Full
CH3 10:1
5.00 V/div
DC Full
CH4 10:1
5.00 V/div
DC Full
Edge CH1 ↑
Auto
2.00 V
OPEN-CLOSE

• 0->MAX

⑤ CH1:MTR1 ② CH2:MTRSEL
⑥ CH3:ANGLSW ⑦ CH4:ANGLIN

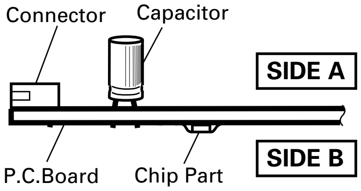

2002/12/19 11:55:55
Stopped
10k
Normal
2kS/s 500ms/div
<< Main:10k >>
CH1 10:1
5.00 V/div
DC Full
CH2 10:1
5.00 V/div
DC Full
CH3 10:1
5.00 V/div
DC Full
CH4 10:1
2.00 V/div
DC Full
Edge CH1 ↑
Auto
2.00 V
0-MAX

4. PCB CONNECTION DIAGRAM

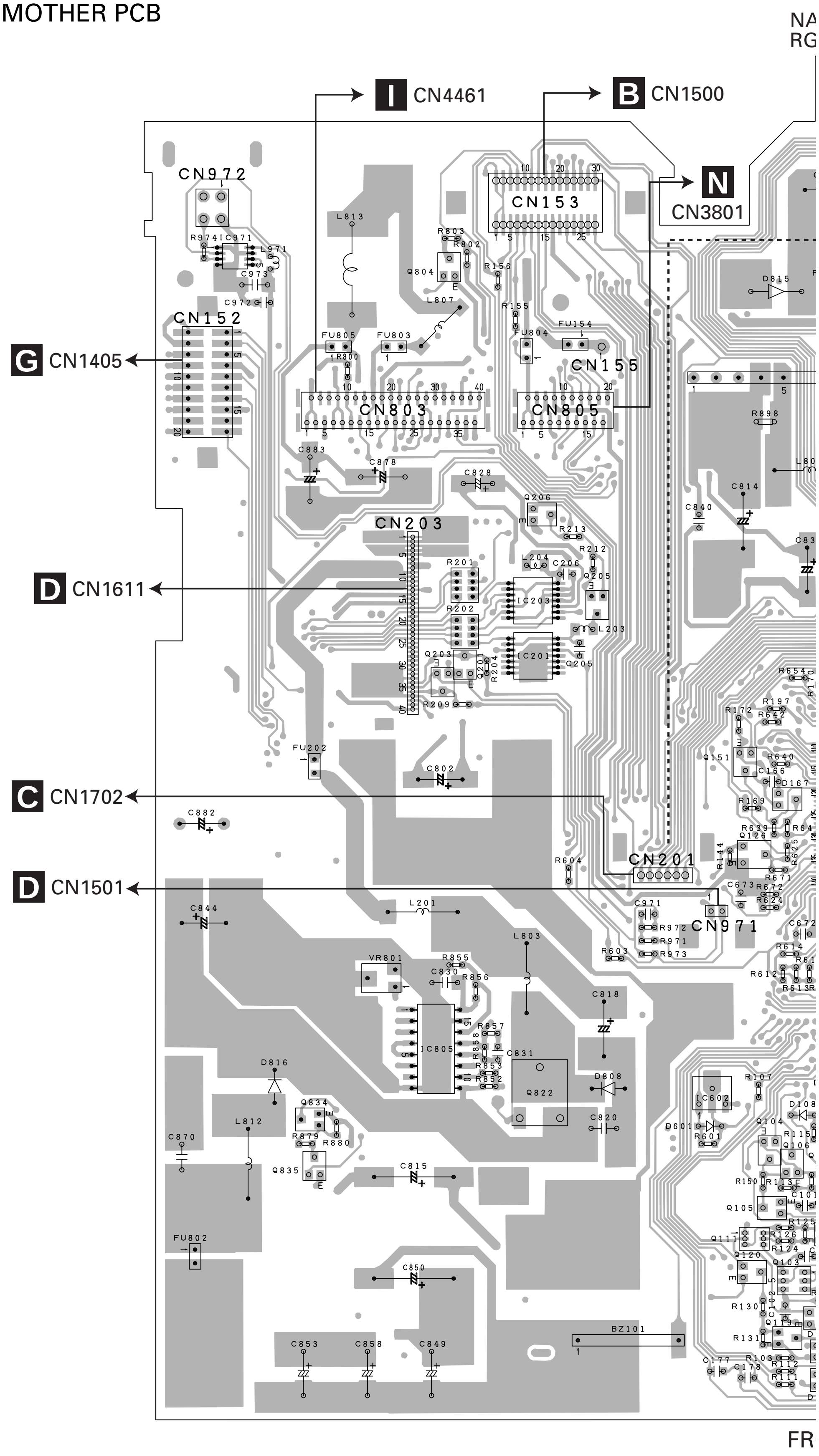
4.1 MOTHER PCB

NOTE FOR PCB DIAGRAMS

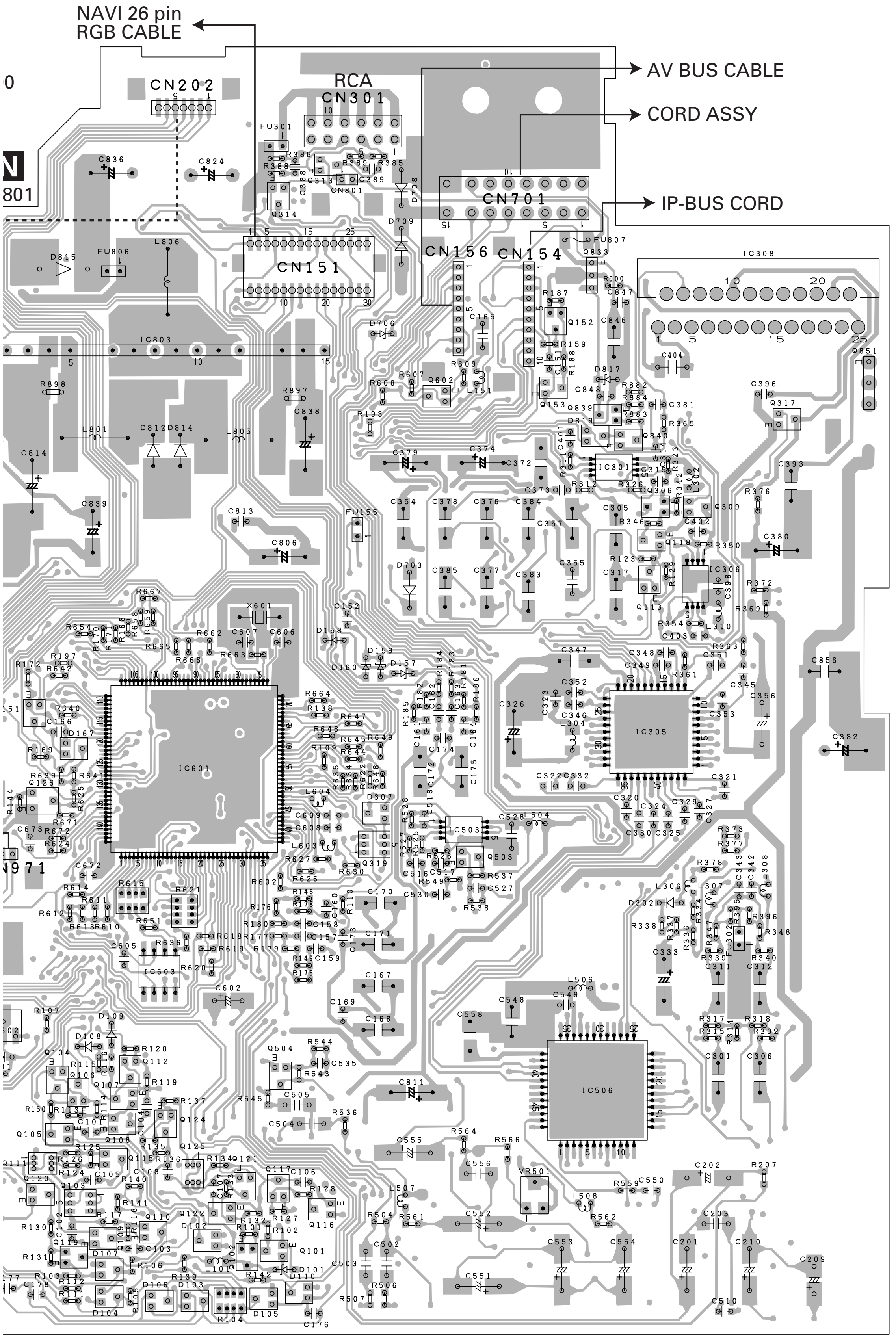
1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams


Connector
Capacitor
SIDE A
SIDE B
P.C.Board
Chip Part

A MOTHER PCB


NA
RG
I CN4461
B CN1500
N CN3801
G CN1405
D CN1611
C CN1702
D CN1501
CN972
CN153
CN152
CN803
CN805
CN155
CN203
CN201
CN971
IC971
IC203
IC201
IC805
IC602
L813
L807
L971
L204
L203
L201
L803
L812
Q804
Q206
Q205
Q203
Q201
Q834
Q835
Q822
Q151
Q126
Q104
Q106
Q105
Q111
Q120
Q103
Q119
R974
R803
R802
R155
R800
R213
R212
R201
R202
R204
R209
R604
R603
R855
R856
R857
R858
R853
R852
R879
R880
R898
R654
R197
R172
R642
R640
R169
R639
R625
R144
R671
R672
R624
R972
R971
R973
R614
R612
R613
R107
R601
R115
R150
R113
R125
R126
R124
R130
R131
R103
R112
R111
C973
C972
C883
C878
C828
C206
C205
C802
C882
C844
C830
C818
C831
C820
C870
C815
C850
C853
C858
C849
C814
C840
C971
C673
C672
C166
C101
C102
C177
C178
FU805
FU803
FU804
FU154
FU202
FU802
D815
D816
D808
D601
D167
D108
VR801
BZ101
FR

SIDE A


NAVI 26 pin
RGB CABLE
AV BUS CABLE
CORD ASSY
IP-BUS CORD
RCA
CN301
CN202
CN701
CN151
CN156
CN154
IC803
IC308
IC601
IC305
IC301
IC306
IC503
IC506
IC603
X601
FU301
FU806
FU807
FU155
VR501
801
N971
FRONT

IC,Q,ADJ

Q313

Q314

IC971

Q804 Q833 IC308

Q152

IC803

Q851

Q602

Q153 Q839 Q317

Q840

Q206 IC301

Q306

Q309

Q118

Q205 IC306

IC203

Q201

Q113 Q203 IC201

Q151

IC305

IC601

Q126

IC503

Q503

Q319

VR801

IC603

IC805

Q822 IC602

Q834 Q112 Q504

Q104

Q106 Q107

IC506 Q835

Q124

Q105 Q108

Q125 Q121 Q115 Q111

Q117 VR501 Q120

Q103 Q116

Q122 Q110 Q109

Q102

Q101 Q119

A

A

A MOTHER PCB

B

C

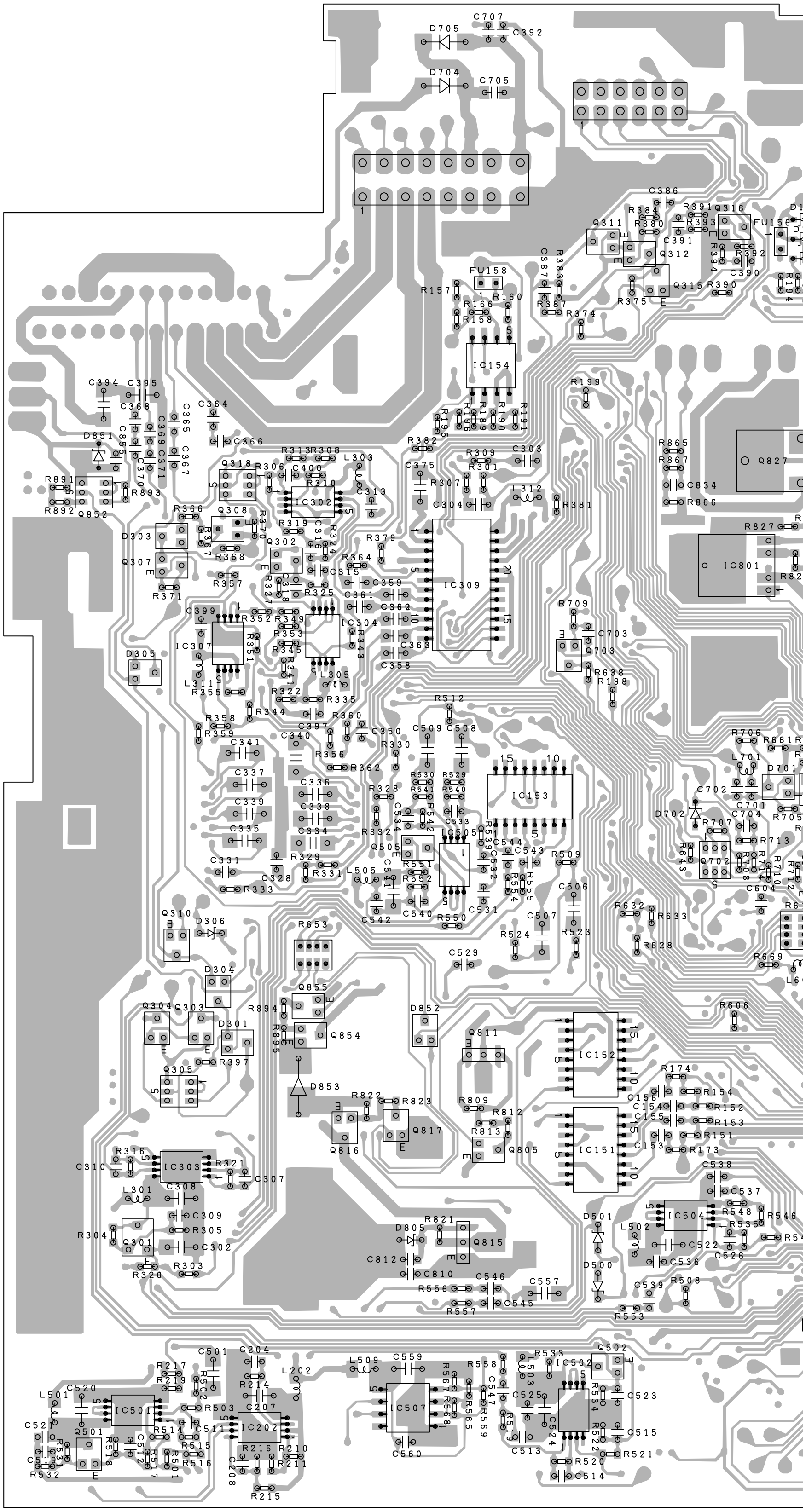
D

E

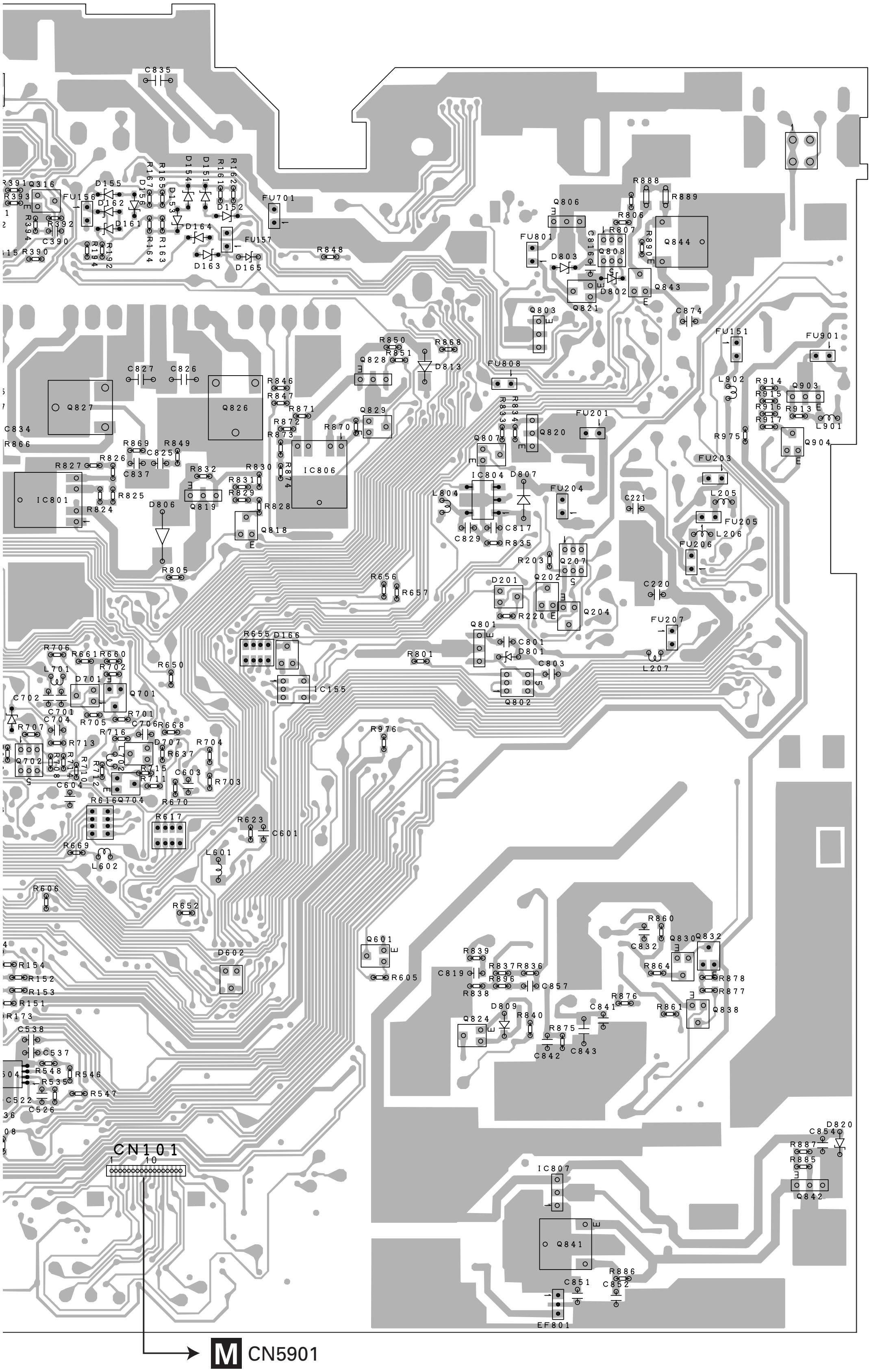
F

IC,Q

Q316
Q806 Q311
Q312
Q844
Q315 Q808
Q843
Q803 Q821
IC154
Q828
Q903
Q829 Q318 Q820 Q826 Q827
Q904
Q308 IC302 Q807
IC806 Q852
Q302 IC804
Q819 Q307 IC801
Q818 IC307 IC304 IC309
Q207
Q202 Q703
Q204
Q801
Q701 IC155
IC153 Q802
IC505
Q505
Q704 Q702
Q310
Q855
Q304 Q303
Q854 Q811
Q832 IC152
Q305 Q601 Q830
Q817
Q824 Q816 Q805 IC151 Q838
IC303
IC504
Q301 Q815
IC807
Q502
IC502 Q842
IC501 IC507 Q841
Q501 IC202


D705
C707
C392
D704
C705
C386
R384
R391
Q316
Q311
R380
R393
FU156
C391
Q312
R394
R392
C387
R388
FU158
C390
R157
R166
R160
R387
R374
R375
Q315
R390
R158
IC154
R199
C394
C395
C368
C364
C365
C369
C371
C367
C366
D851
C855
C370
R195
R196
R189
R190
R191
R382
R865
R867
Q827
R313
R308
L303
R309
C303
C834
Q318
R306
C400
C375
R301
R891
R310
R307
L312
R892
R893
C313
IC302
C304
R381
R866
Q852
R366
Q308
R370
R319
R324
C316
R379
R827
D303
R367
R368
Q302
C317
IC801
Q307
R364
C359
IC309
R357
C315
R82
R371
R327
R325
C361
C360
C362
R709
C399
R352
R349
IC304
R343
C703
R353
IC307
R351
R345
C363
703
D305
L305
R341
C358
R638
L311
R355
R198
R335
R512
R344
R358
R360
R706
C397
C350
C509
C508
R359
R861
C340
R330
C341
L701
R356
R362
C337
R530
R529
D701
C336
IC153
R541
R540
C702
R328
C338
C339
C534
R542
C533
C701
D702
C704
R707
R705
C335
IC505
R332
C334
C544
Q505
C543
R713
R643
R329
R509
Q702
C331
R331
R551
R552
C532
L505
R555
C604
C328
C541
C506
R333
C531
R632
R633
C540
C542
R550
C507
Q310
D306
R653
R524
R523
R628
C529
R669
D304
Q855
R606
Q304
Q303
R894
D852
D301
R895
Q854
Q811
IC152
R397
Q305
R174
D853
R154
R822
C156
R152
R823
R809
C154
R153
C155
R812
Q817
R151
R813
Q816
C153
Q805
R173
IC151
R316
R321
C538
C310
IC303
C307
C308
L301
C537
C309
R548
D805
R821
IC504
R546
R304
R305
R539
D501
Q301
L502
C302
Q815
C522
C526
C812
C536
R320
R303
C810
D500
C546
C557
C539
R508
R556
C545
R557
R553
Q502
C501
C204
R533
R217
L509
C559
R558
IC502
R219
L202
C520
R502
R214
R567
C548
L503
L501
R503
C207
IC501
IC507
C547
C525
R534
C523
R568
R565
R510
R514
C511
IC202
C521
Q501
R569
C524
R522
C515
R531
R518
R515
R216
R210
C513
C519
C512
R517
R501
R516
R211
R520
R521
R532
C208
C560
C514
R215

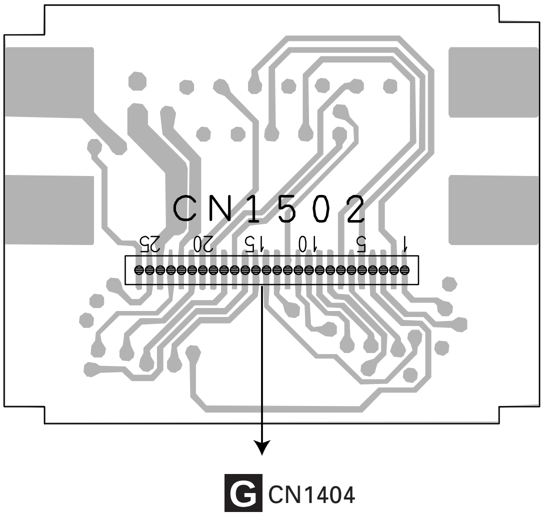
SIDE B


C835
R391
Q316
R393
R394
R392
C390
R390
FU156
D155
D162
D161
R194
R192
R167
R165
R164
R163
D154
D153
D151
R161
R162
D152
D164
D163
D165
FU157
FU701
R848
Q806
R888
R889
R806
R807
Q808
R890
Q844
FU801
D803
C816
D802
Q843
Q821
Q803
C874
FU151
FU901
R850
R851
R868
Q828
D813
FU808
L902
R914
R915
R916
R917
Q903
R913
L901
Q904
R975
C827
C826
Q827
Q826
C834
R866
R846
R847
R871
R872
R873
Q829
R870
R834
R833
Q820
FU201
R869
R849
C825
R826
C837
R827
IC801
R825
R824
R832
Q819
R831
R829
R830
R874
R828
IC806
Q818
D806
R805
Q807
IC804
D807
L804
FU204
C829
C817
R835
C221
FU203
L205
FU205
L206
FU206
R203
Q207
Q202
D201
R220
Q204
C220
FU207
L207
R656
R657
R655
D166
R801
Q801
C801
D801
C803
Q802
IC155
R706
R661
R660
L701
R702
R650
D701
Q701
C702
C701
R701
C704
R705
R707
R713
R716
C706
R668
D707
R704
R637
Q702
R710
R714
R712
L702
R715
R711
C603
R703
C604
R616
Q704
R670
R617
R623
C601
R669
L602
L601
R606
R652
R976
Q601
R605
D602
R154
R152
R153
R151
R173
C538
C537
R546
R548
R535
R547
C522
C526
R860
Q830
Q832
C832
R864
R878
R877
R839
R837
R836
C819
R896
C857
R838
R876
R861
Q838
D809
C841
Q824
R840
R875
C842
C843
CN101
1
10
D820
C854
R887
R885
Q842
IC807
Q841
R886
C851
C852
EF801

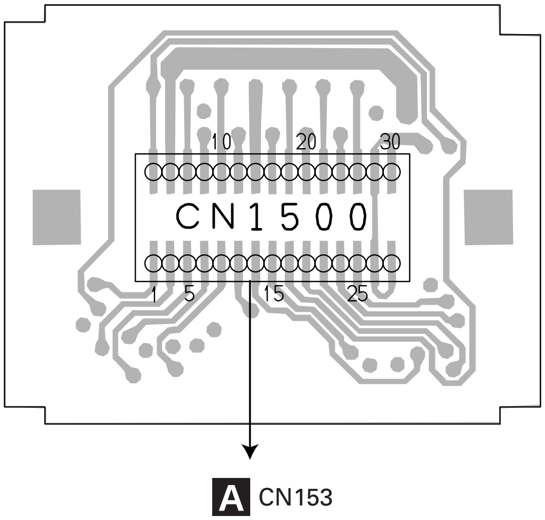
M CN5901

4.2 RELAY PCB AND EXTENSION PCB

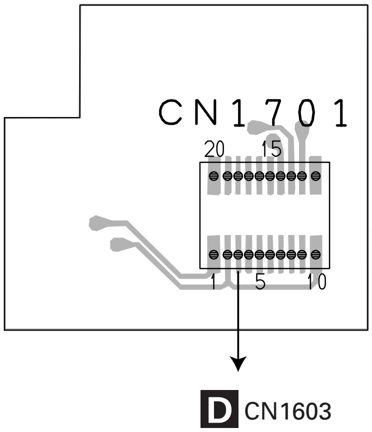
B RELAY PCB **SIDE A**


CN1502
25
20
15
10
5
1
G CN1404

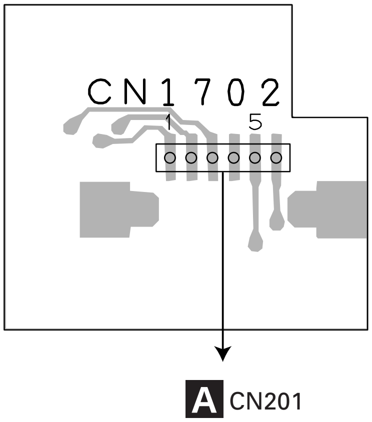
B RELAY PCB **SIDE B**


10
20
30
CN1500
1
5
15
25
A CN153

C EXTENSION PCB **SIDE A**


CN1701
20
15
1
5
10
D CN1603

C EXTENSION PCB **SIDE B**


CN1702
1
5
A CN201

B **C**

A

B

C

D

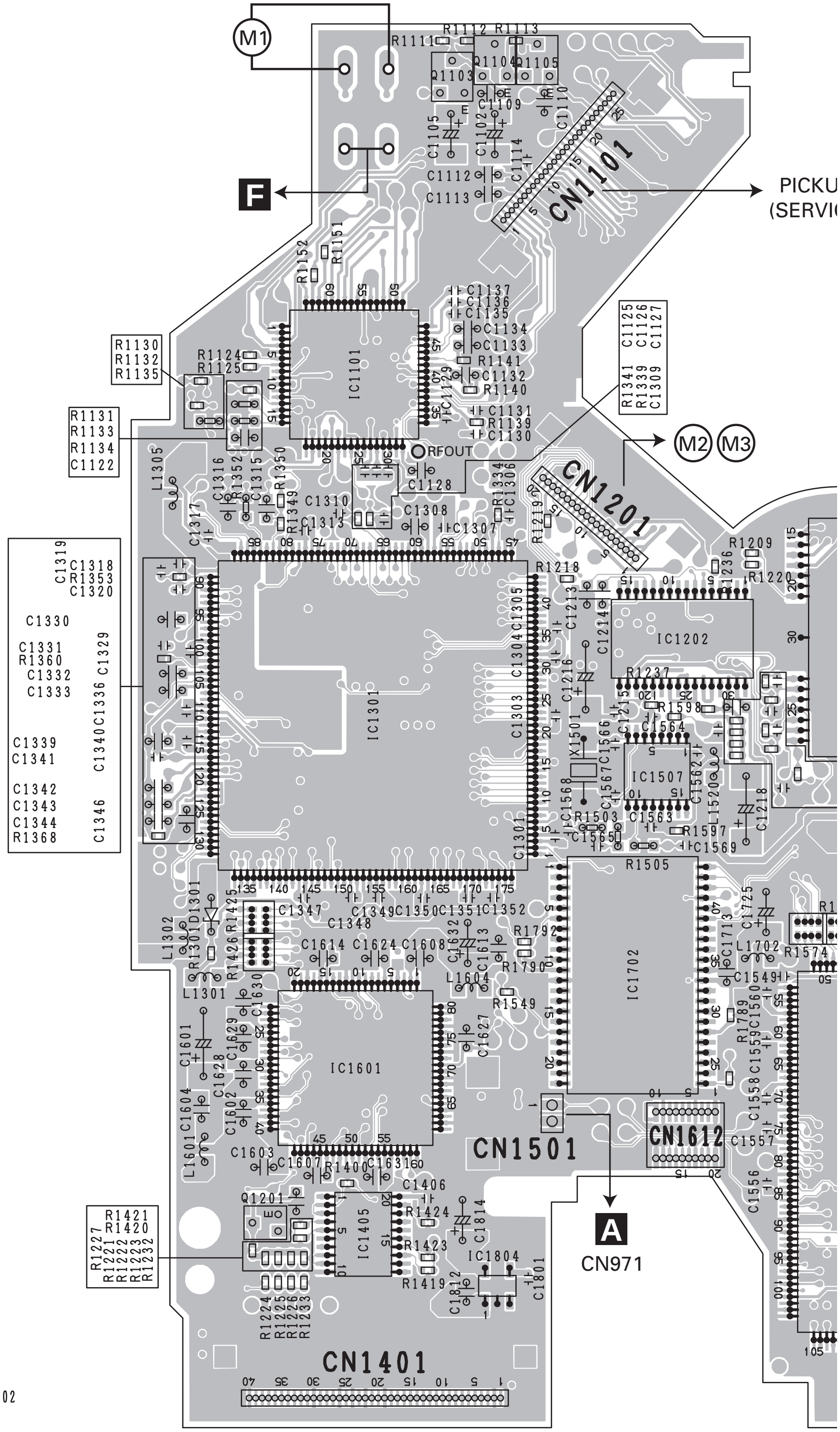
E

F

4.3 DVD CORE UNIT(MS3)

D DVD CORE UNIT(MS3)

IC,Q	ADJ
Q1104 Q1105	
Q1103	
IC1101	
IC1201	
IC1202	
IC1301	
IC1507	
IC1504	
IC1502	
IC1706	
IC1702	
IC1601	
IC1701	
IC1503	
Q1201	
IC1405	
IC1804	
Q1501	VR1502


M1
R1111
R1112 R1113
Q1104 Q1105
Q1103
C1109
C1110
C1105
C1102
C1114
C1112
C1113
F
CN1101
PICKU
(SERVI
R1152
R1151
C1137
C1136
C1135
C1134
C1133
R1141
C1132
R1140
C1131
R1139
C1130
IC1101
R1130
R1132
R1135
R1124
R1125
R1131
R1133
R1134
C1122
C1125 C1126 C1127
R1341 R1339 C1309
M2
M3
RFOUT
C1128
CN1201
L1305
C1316
R1352
C1315
R1350
C1317
R1349
C1310
C1313
C1308
C1307
R1334
C1306
R1219
R1209
R1236
R1220
R1218
C1319
C1318
R1353
C1320
C1330
C1331
R1360
C1332
C1333
C1329
C1336
C1339
C1341
C1340
C1342
C1343
C1344
R1368
C1346
IC1301
C1305
C1304
C1303
C1301
C1213
C1214
IC1202
R1237
C1216
C1215
R1598
C1564
X1501
C1566
C1567
C1568
IC1507
C1562
L1520
C1218
R1503
C1563
C1565
R1597
C1569
R1505
IC1702
L1302
D1301
R1301
R1425
R1426
L1301
C1347
C1348
C1349
C1350
C1351
C1352
C1614
C1624
C1608
C1632
C1613
L1604
R1792
R1790
R1549
C1725
C1713
L1702
R1574
C1549
R1789
C1560
C1559
C1558
C1557
C1556
C1630
C1601
C1629
C1628
C1627
IC1601
C1604
C1602
L1601
C1603
C1607
R1400
C1631
CN1501
CN1612
A
CN971
Q1201
C1406
R1424
C1814
R1423
IC1405
IC1804
R1419
C1812
C1801
R1421
R1420
R1227
R1221
R1222
R1223
R1232
R1224
R1225
R1226
R1233
CN1401

D

A

SIDE A

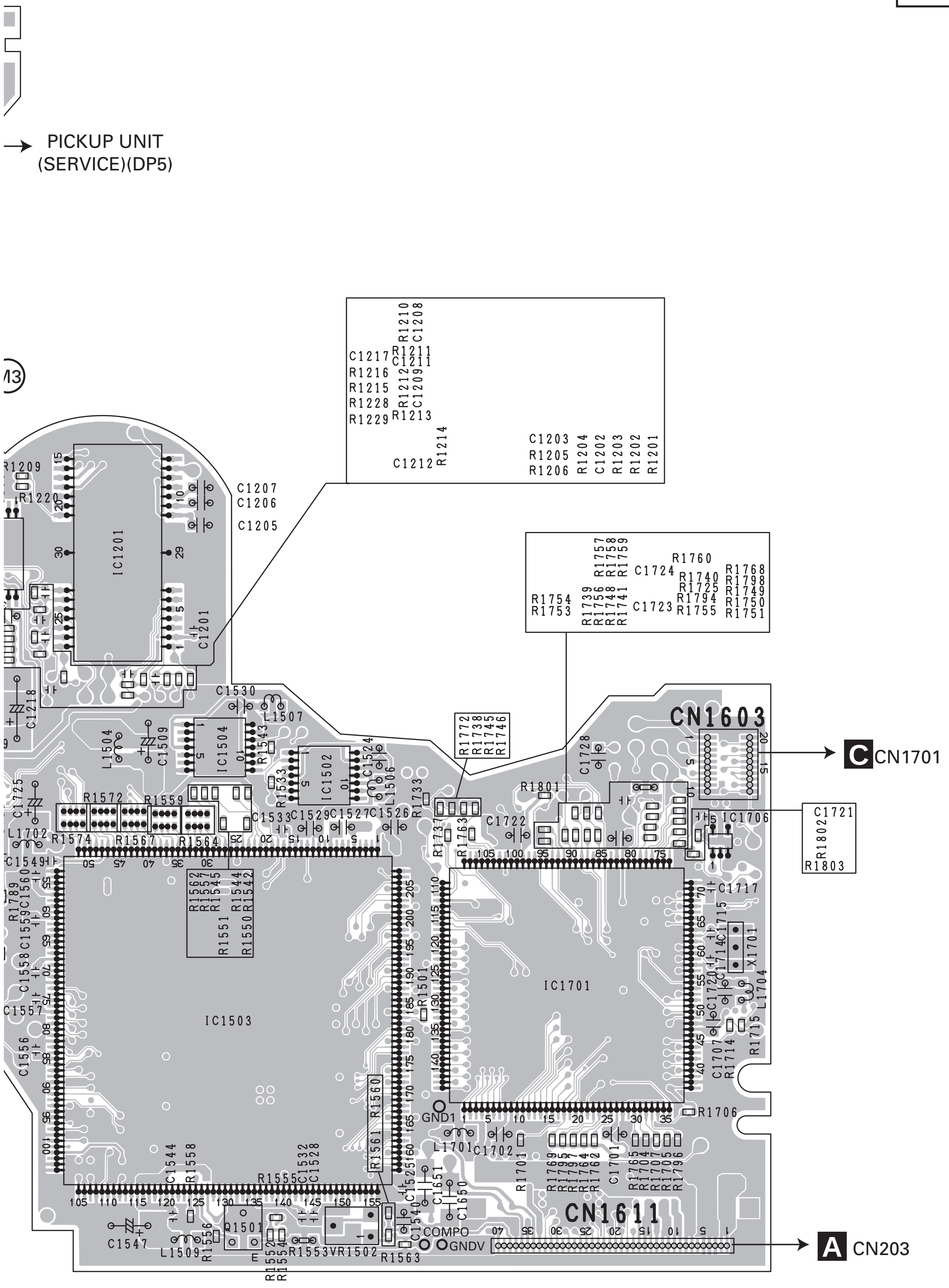
B

C

D

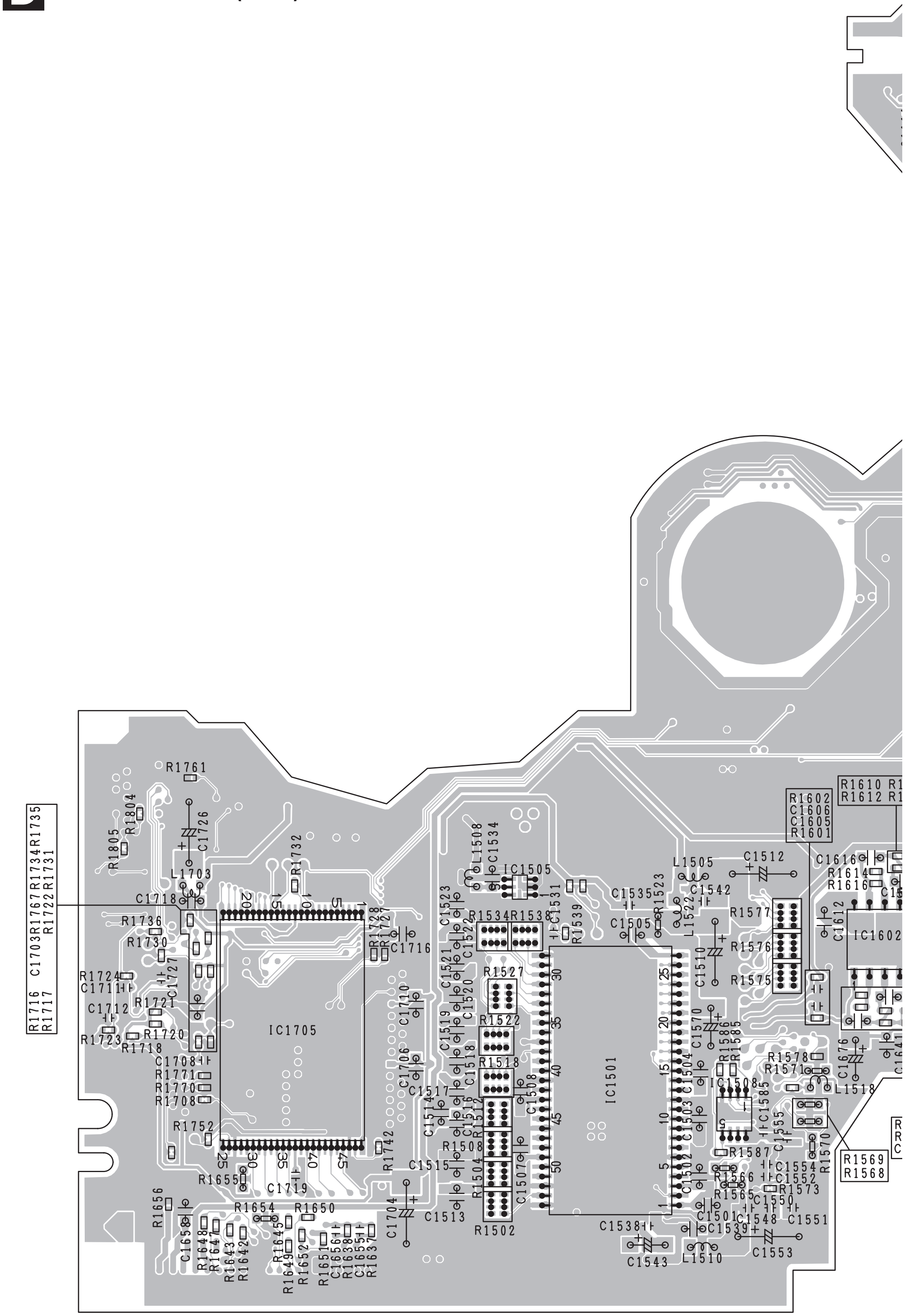
E

F

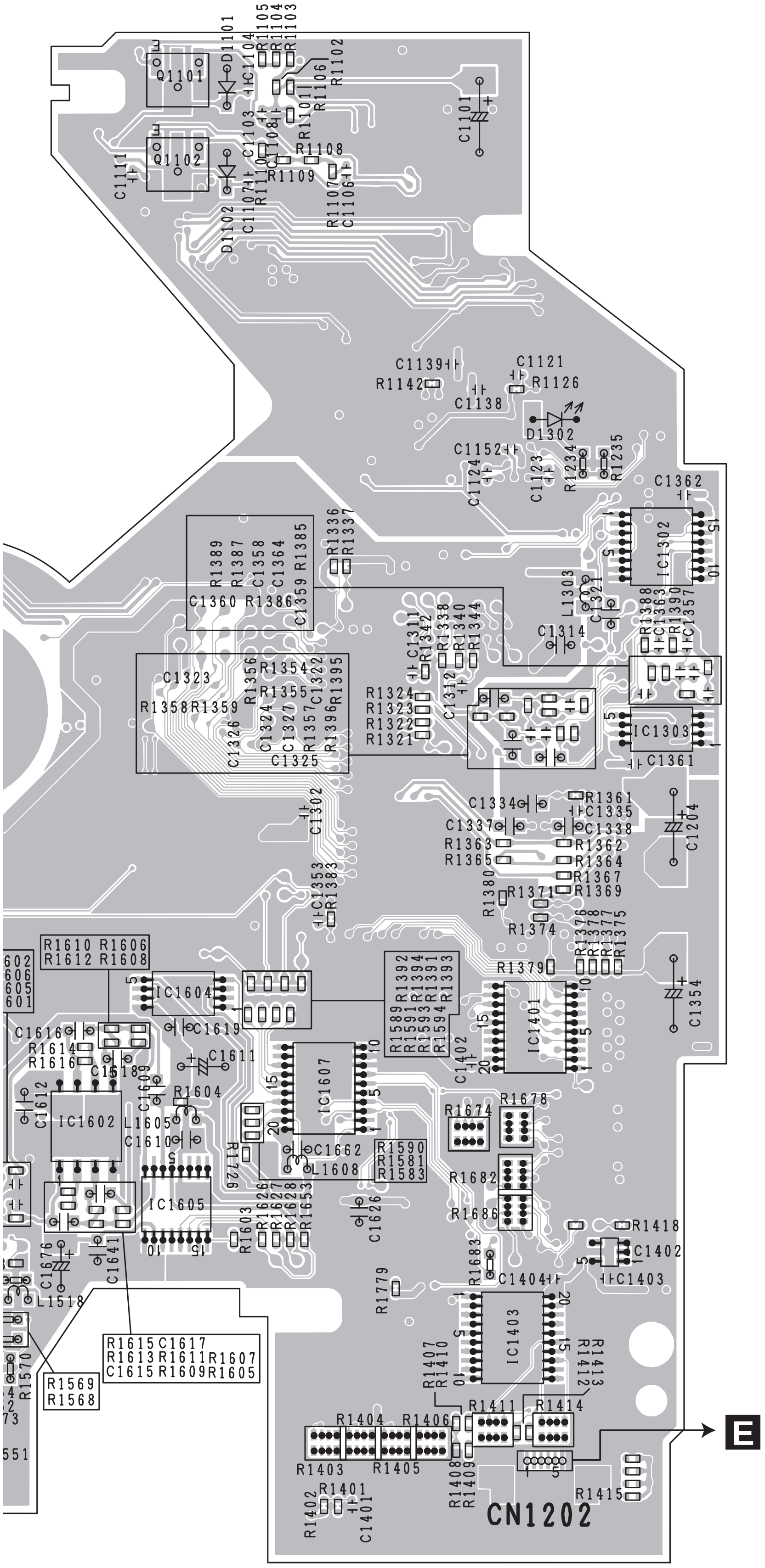

PICKUP UNIT
(SERVICE)(DP5)
M3
IC1201
C1207
C1206
C1205
C1201
R1209
R1220
C1218
C1217
R1216
R1215
R1228
R1229
R1210
C1208
R1211
C1211
R1212
C1209
R1213
R1214
C1212
C1203
R1205
R1206
R1204
C1202
R1203
R1202
R1201
C1530
L1507
L1504
C1509
IC1504
R1543
IC1502
C1524
L1506
R1533
R1733
R1772
R1738
R1745
R1746
C1725
R1572
R1559
L1702
R1574
R1567
R1564
C1533
C1529
C1527
C1526
C1549
R1789
C1560
C1559
C1558
C1557
C1556
R1562
R1557
R1545
R1544
R1542
R1551
R1550
IC1503
R1501
R1560
R1561
C1544
R1558
R1555
C1532
C1528
C1525
C1651
C1650
C1540
Q1501
C1547
L1509
R1556
R1552
R1554
R1553
VR1502
R1563
COMPO
GNDV
GND1
L1701
C1702
R1701
R1769
R1795
R1797
R1764
R1762
C1701
R1765
R1704
R1707
R1705
R1796
CN1611
R1706
IC1701
C1728
R1801
C1722
R1731
R1763
R1754
R1753
R1739
R1756
R1748
R1741
R1757
R1758
R1759
C1724
C1723
R1760
R1740
R1725
R1794
R1755
R1768
R1798
R1749
R1750
R1751
CN1603
IC1706
C1721
R1802
R1803
C1717
C1715
X1701
C1714
C1720
L1704
R1715
C1707
R1714
C CN1701
A CN203

D

D DVD CORE UNIT(MS3)


R1716
R1717
C1703
R1767
R1722
R1734
R1731
R1735
R1761
R1804
R1805
C1726
L1703
C1718
R1732
R1736
R1730
R1724
C1711
C1727
C1712
R1721
R1723
R1720
R1718
C1708
R1771
R1770
R1708
R1752
IC1705
R1728
R1727
C1716
C1710
C1706
C1717
R1742
R1655
C1719
R1656
R1654
R1650
C1653
R1648
R1647
R1643
R1642
R1645
R1649
R1652
R1651
C1656
R1638
C1655
R1637
C1704
C1515
C1513
L1508
C1534
IC1505
C1523
R1534
R1538
C1531
R1539
C1522
C1521
R1527
C1520
C1519
R1522
C1518
R1518
C1516
C1514
R1512
C1508
R1508
R1504
C1507
R1502
IC1501
C1535
R1523
C1505
L1505
C1542
L1522
C1512
R1577
R1576
R1575
C1510
C1570
R1586
R1585
C1504
C1503
C1502
IC1508
C1585
C1555
R1578
R1571
R1587
C1554
C1552
R1566
R1573
R1565
C1550
C1501
C1548
C1551
C1539
C1553
C1538
C1543
L1510
R1602
C1606
C1605
R1601
R1610
R1612
C1616
R1614
R1616
C1612
IC1602
C1676
L1518
R1570
R1569
R1568
1
5
10
15
20
25
30
35
40
45
50

SIDE B


Q1101
Q1102
D1101
D1102
C1101
C1104
C1103
C1107
C1106
C1111
R1101
R1102
R1103
R1104
R1105
R1106
R1107
R1108
R1109
R1110
C1108
C1121
C1138
C1139
C1152
C1123
C1124
R1126
R1142
R1234
R1235
D1302
C1362
IC1302
L1303
C1321
C1314
R1388
C1363
R1390
C1357
R1389
R1387
C1358
C1364
R1385
R1336
R1337
C1360
R1386
C1359
C1323
R1358
R1359
R1356
R1354
C1322
R1395
R1355
C1324
C1327
R1357
R1396
C1326
C1325
C1311
R1342
R1338
R1340
R1344
R1324
R1323
R1322
R1321
C1312
IC1303
C1361
C1302
C1334
R1361
C1335
C1337
C1338
R1363
R1362
R1365
R1364
R1367
R1369
R1371
R1380
R1374
C1353
R1383
C1204
R1376
R1378
R1377
R1375
R1379
C1354
R1610
R1606
R1612
R1608
IC1604
R1392
R1394
R1391
R1393
R1589
R1591
R1593
R1594
IC1401
C1402
C1616
R1614
R1616
C1518
C1619
C1611
C1609
R1604
C1612
IC1602
L1605
C1610
IC1607
C1662
L1608
R1590
R1581
R1583
R1726
R1674
R1678
R1682
R1686
IC1605
R1603
R1626
R1627
R1628
R1653
C1626
C1676
C1641
L1518
R1418
C1402
C1403
C1404
R1683
R1779
IC1403
R1407
R1410
R1413
R1412
R1411
R1414
R1404
R1406
R1403
R1405
R1408
R1409
R1415
R1401
R1402
C1401
CN1202
R1615
C1617
R1613
R1611
R1607
C1615
R1609
R1605
R1570
R1569
R1568
E

IC,Q

Q1101

Q1102

IC1302

IC1303

IC1604

IC1401

IC1505

IC1607

IC1602

IC1605

IC1705

IC1402

IC1501

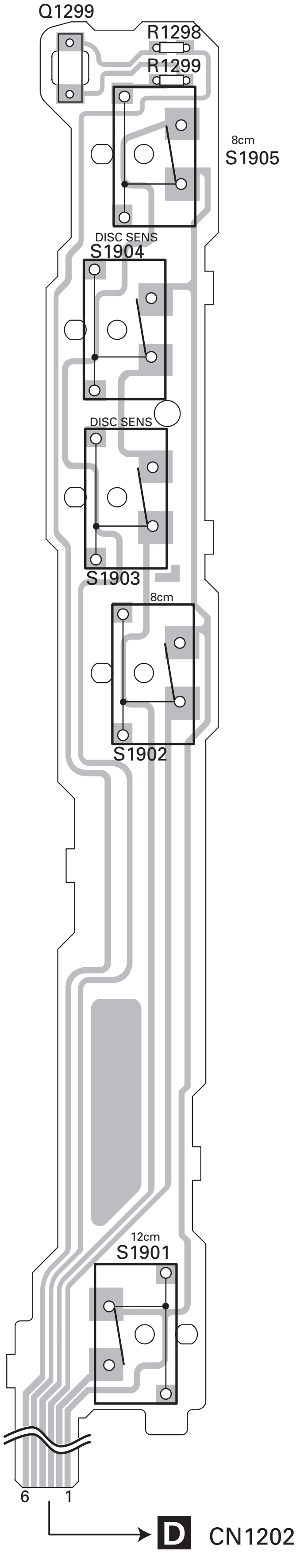
IC1508

IC1403

D

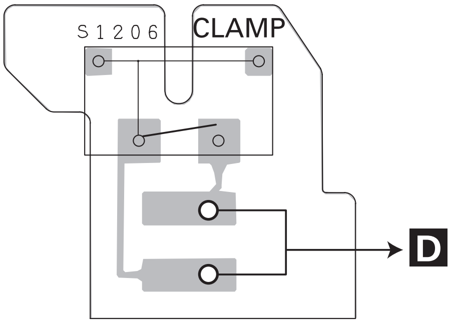
4.4 COMPOUND UNIT(A) AND COMPOUND UNIT(B)

E COMPOUND UNIT(A)



Q1299
R1298
R1299
8cm
S1905
DISC SENS
S1904
DISC SENS
S1903
8cm
S1902
12cm
S1901
6
1
D
CN1202

F COMPOUND UNIT(B)



S1206
CLAMP
D

E F

A

B

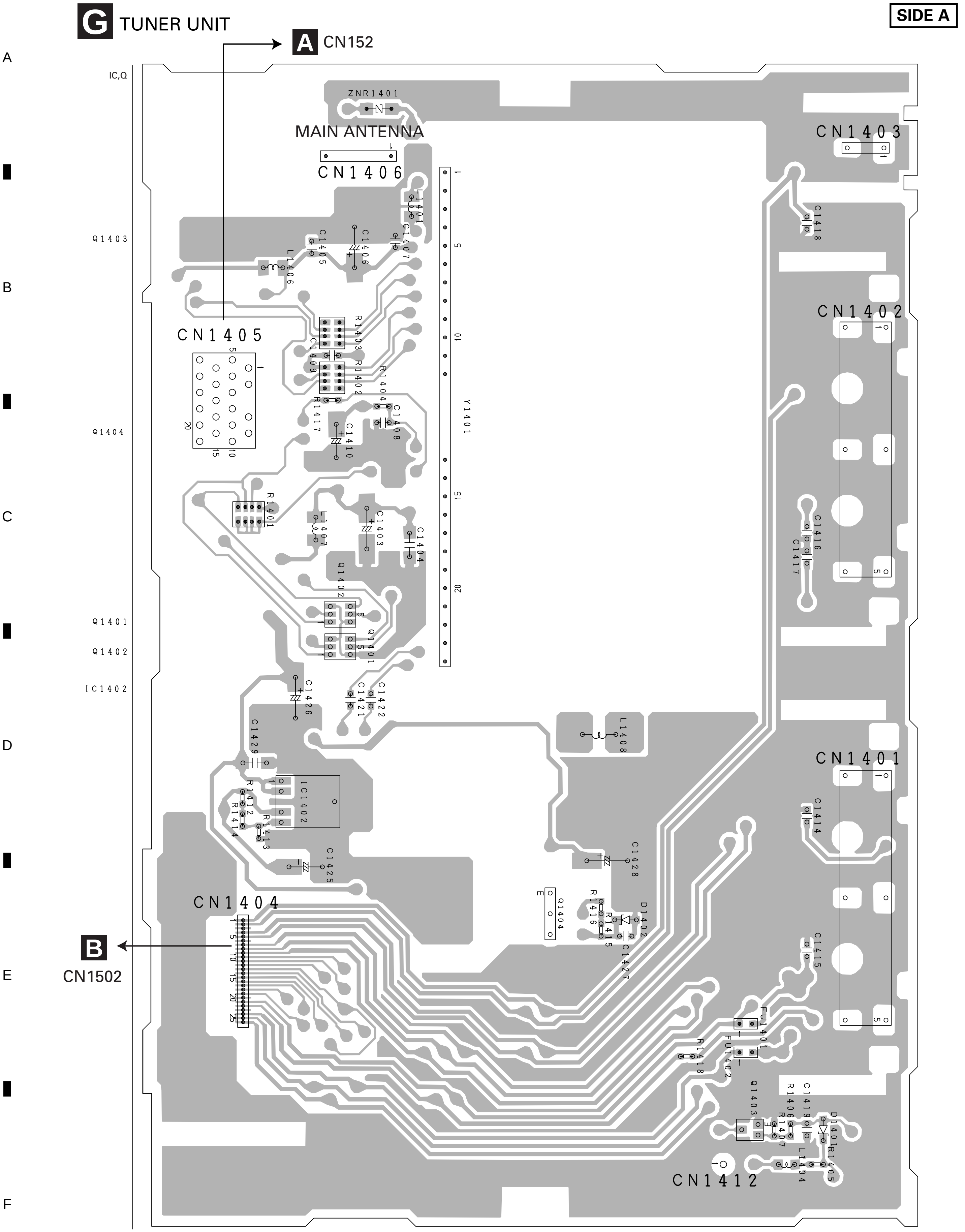
C

D

E

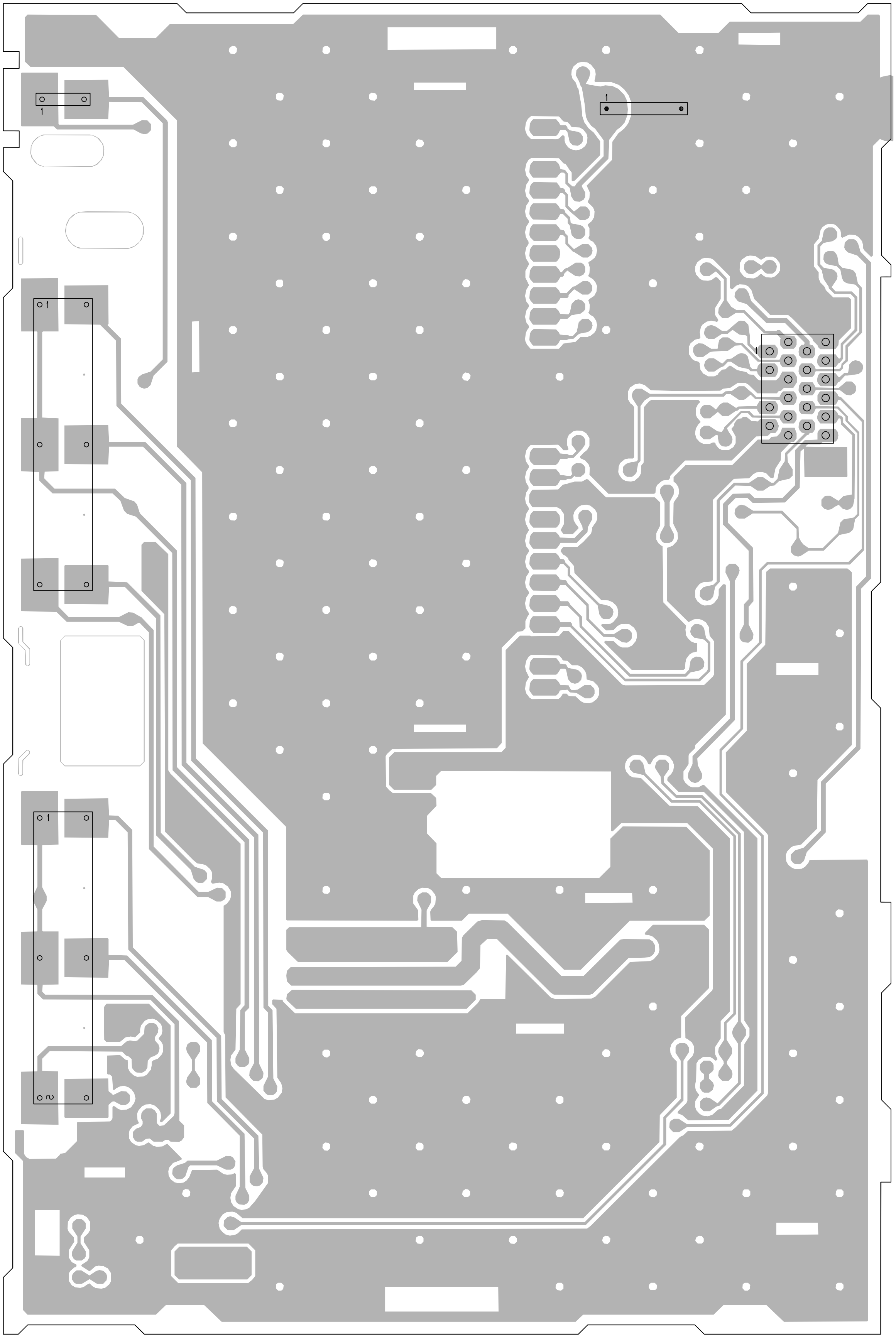
F

4.5 TUNER UNIT


G
TUNER UNIT
A
CN152
SIDE A
A
B
C
D
E
F
IC,Q
Q1403
Q1404
Q1401
Q1402
IC1402
ZNR1401
MAIN ANTENNA
CN1406
CN1403
L1401
C1405
C1406
C1407
L1406
C1418
CN1405
R1403
C1409
R1402
R1404
R1417
C1408
C1410
Y1401
CN1402
R1401
L1407
C1403
C1404
Q1402
Q1401
C1416
C1417
C1426
C1421
C1422
L1408
C1429
CN1401
R1412
R1414
IC1402
R1413
C1414
C1425
C1428
Q1404
R1416
R1415
D1402
C1427
CN1404
B
CN1502
C1415
FU1401
R1418
FU1402
Q1403
R1406
C1419
R1407
D1401
R1405
L1404
CN1412
1
5
10
15
20
25

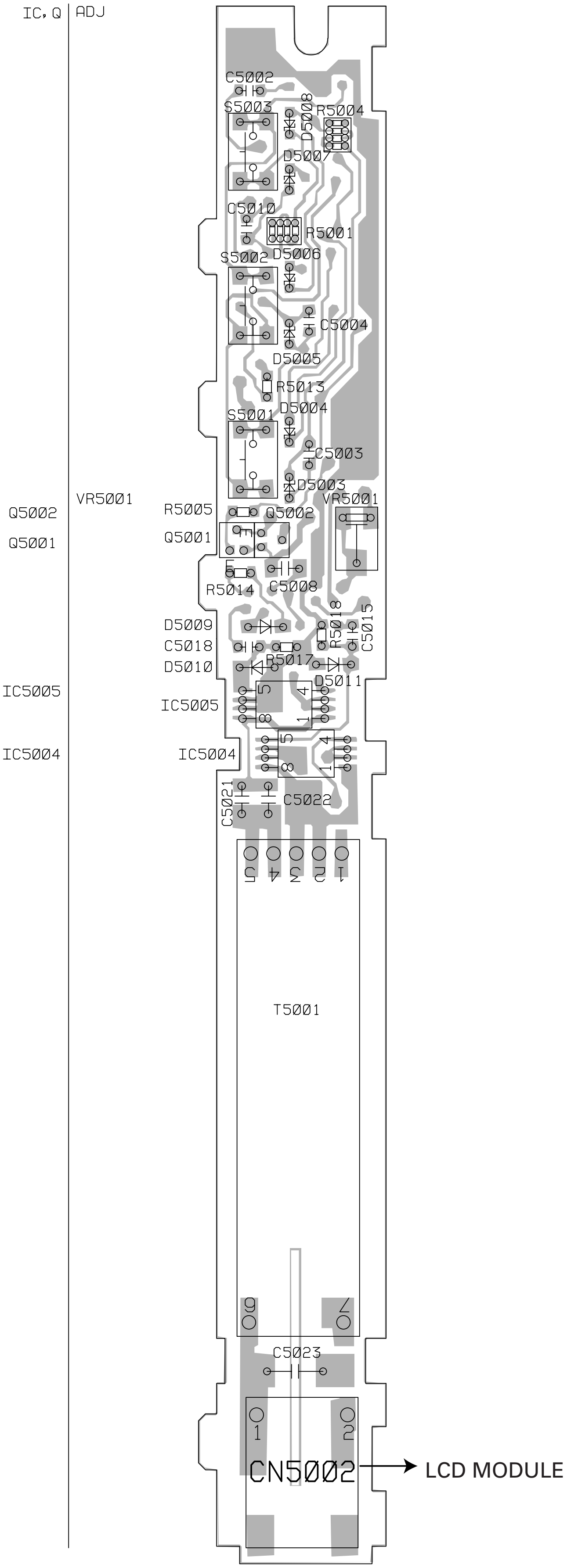
G TUNER UNIT

SIDE B

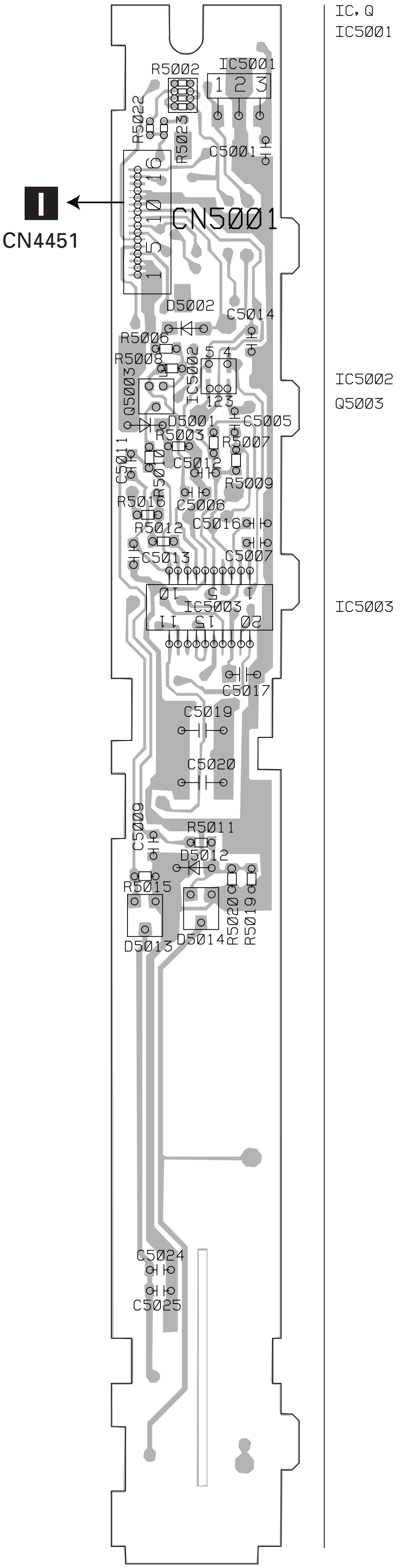


4.6 INVERTER PCB

H INVERTER PCB **SIDE A**


IC, Q
ADJ
Q5002
VR5001
Q5001
IC5005
IC5004
C5002
S5003
D5008
R5004
D5007
C5010
R5001
D5006
S5002
C5004
D5005
R5013
D5004
S5001
C5003
D5003
R5005
Q5002
VR5001
Q5001
R5014
C5008
D5009
R5018
C5015
C5018
R5017
D5010
D5011
IC5005
IC5004
C5021
C5022
5 4 3 2 1
T5001
8 7
C5023
1 2
CN5002
LCD MODULE

H INVERTER PCB **SIDE B**


IC, Q
IC5001
IC5002
Q5003
IC5003
R5002
IC5001
1 2 3
R5022
R5023
C5001
16 10 5 1
CN5001
I
CN4451
D5002
C5014
R5006
R5008
IC5002
5 4
123
Q5003
D5001
C5005
R5003
R5007
C5011
R5010
C5012
R5009
R5016
C5006
R5012
C5016
C5013
C5007
10 5 1
IC5003
11 15 20
C5017
C5019
C5020
C5009
R5011
D5012
R5015
R5020
R5019
D5013
D5014
C5024
C5025

A

B

C

D

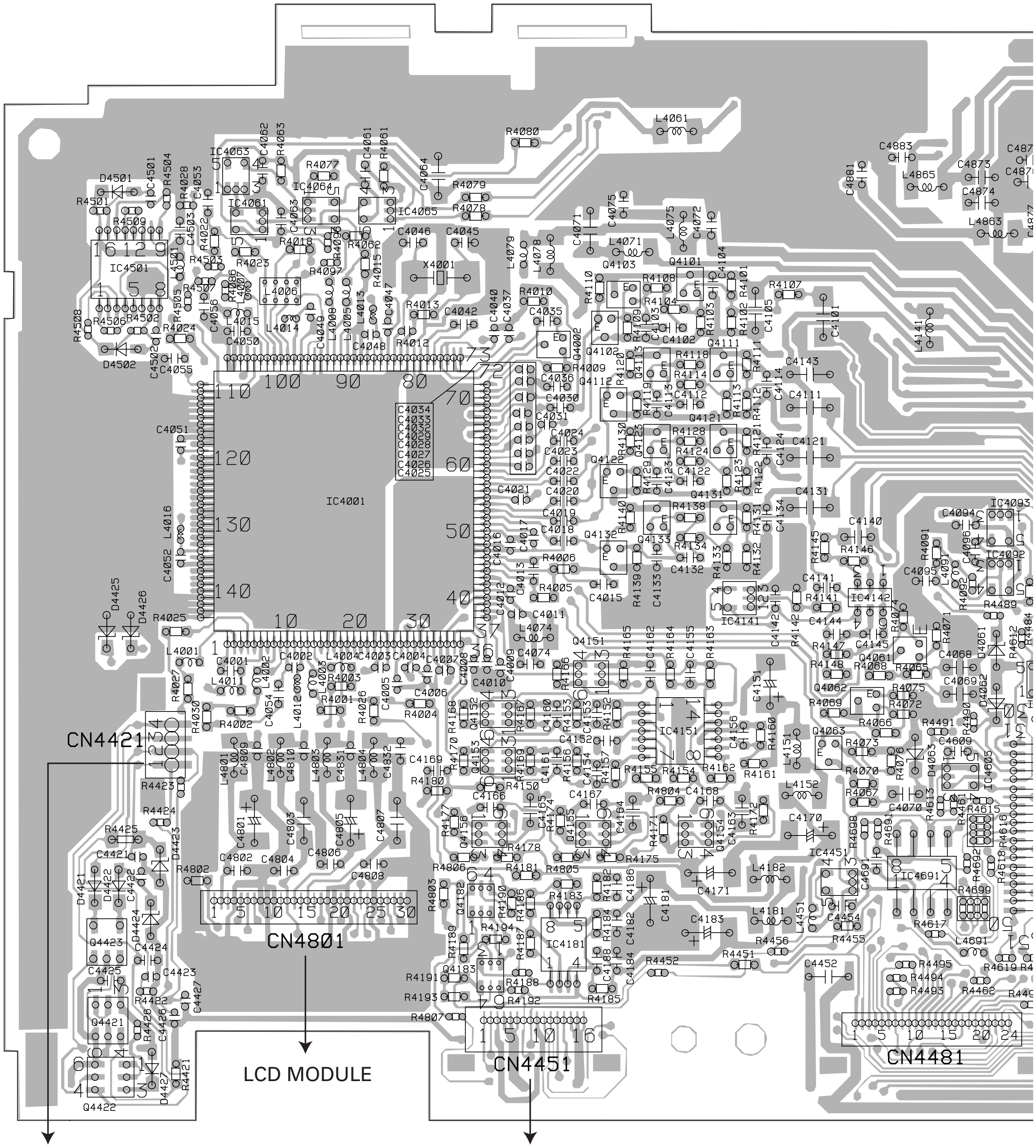
E

F

4.7 MONITOR PCB

I MONITOR PCB

IC, Q
IC4731
IC4732
IC4063 IC4861
IC4064 IC4065
IC4061
Q4103 Q4101
IC4501
IC4701
Q4111
Q4102 IC4841
Q4002
Q4112 Q4113
Q4121
Q4835
Q4122 Q4123
IC4093 Q4741
Q4131 IC4001
Q4133 IC4092
Q4132
IC4142
IC4602 Q4742
IC4141
Q4151 Q4061
Q4062
IC4604 Q4831
IC4151 Q4063
Q4152
Q4601 IC4851
Q4153
IC4605 Q4602
IC4601
Q4154
IC4451 Q4832
Q4156 Q4155
IC4691 IC4603
Q4182
Q4423 IC4181
Q4183
Q4603
Q4421
Q4422


IC4001
CN4421
CN4801
CN4451
CN4481
X4001
LCD MODULE
TOUCH PANEL
H CN5001

A

SIDE A

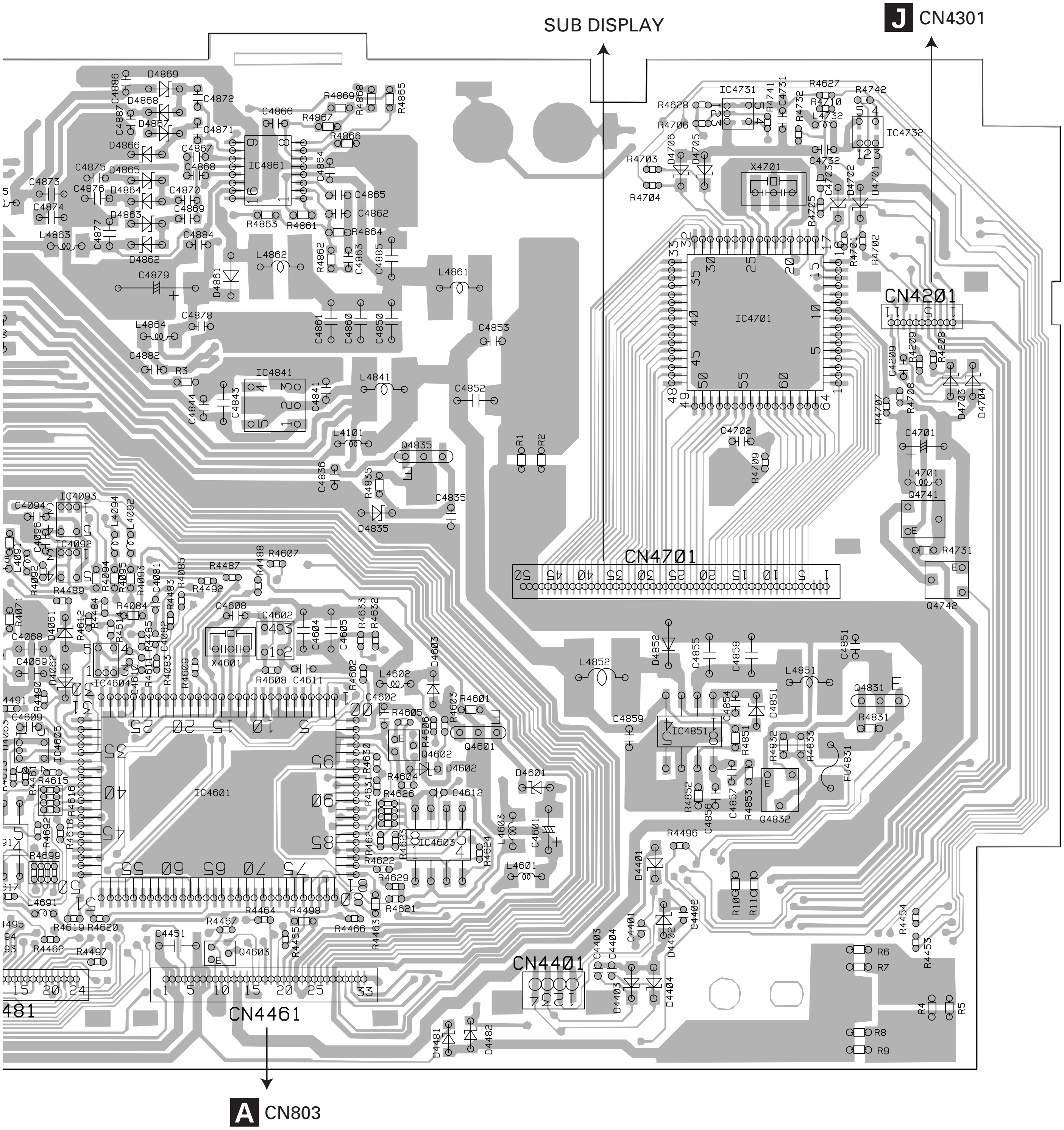
B

C

D

E

F


SUB DISPLAY
J
CN4301
IC4731
IC4732
X4701
IC4701
CN4201
CN4701
IC4861
IC4841
L4861
L4862
L4864
L4841
C4852
C4853
Q4835
D4835
Q4741
Q4742
R4731
IC4093
IC4092
IC4602
X4601
IC4604
IC4605
IC4601
IC4603
Q4601
Q4602
Q4603
D4601
D4602
L4601
L4602
L4603
L4852
L4851
D4852
D4851
IC4851
Q4831
Q4832
FU4831
CN4401
D4401
D4402
D4403
D4404
D4481
D4482
R6
R7
R8
R9
R4
R5
R10
R11
R1
R2
R3
CN4461
481
A
CN803

I

A

I MONITOR PCB

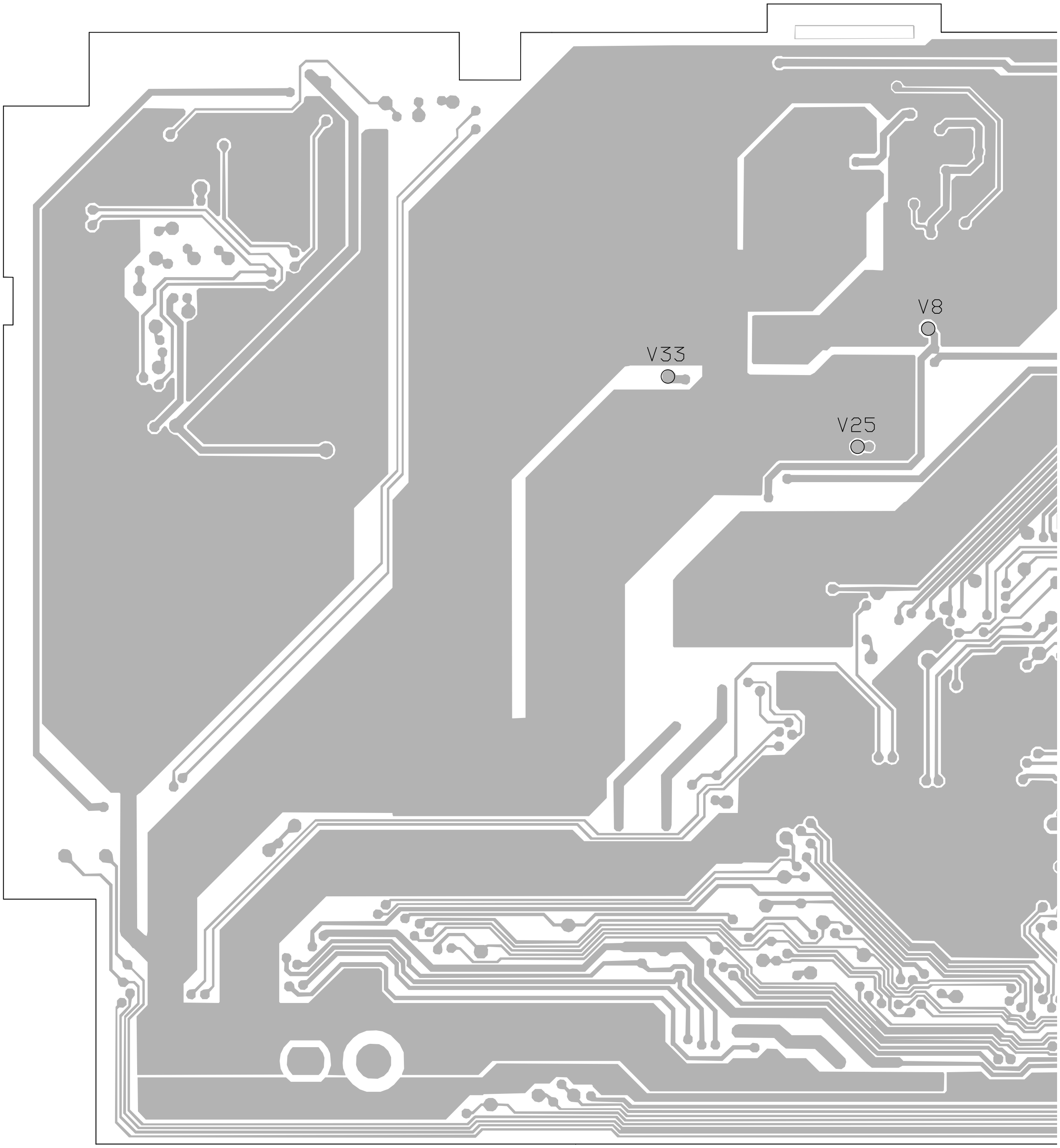
B

C

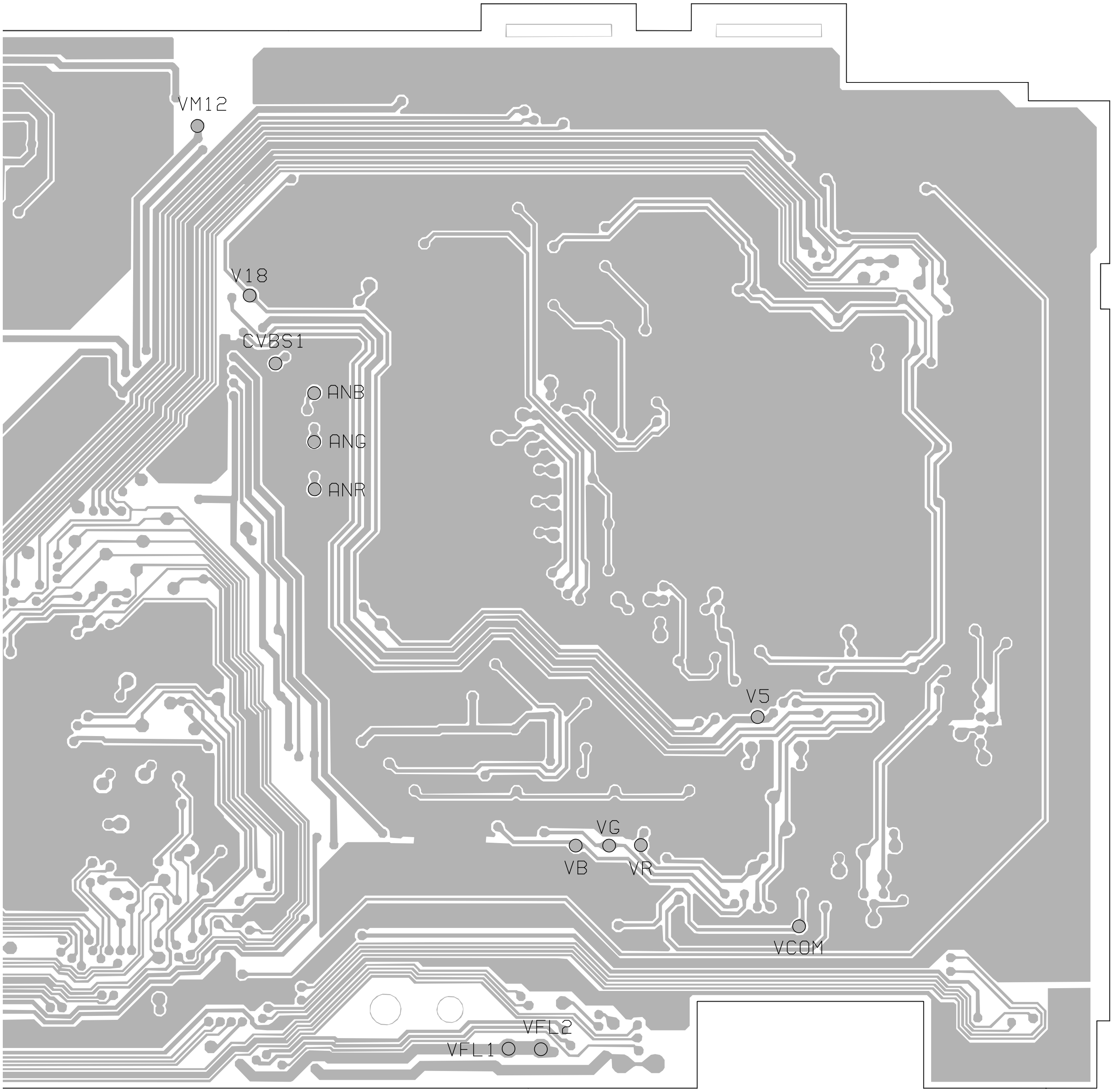
D

E

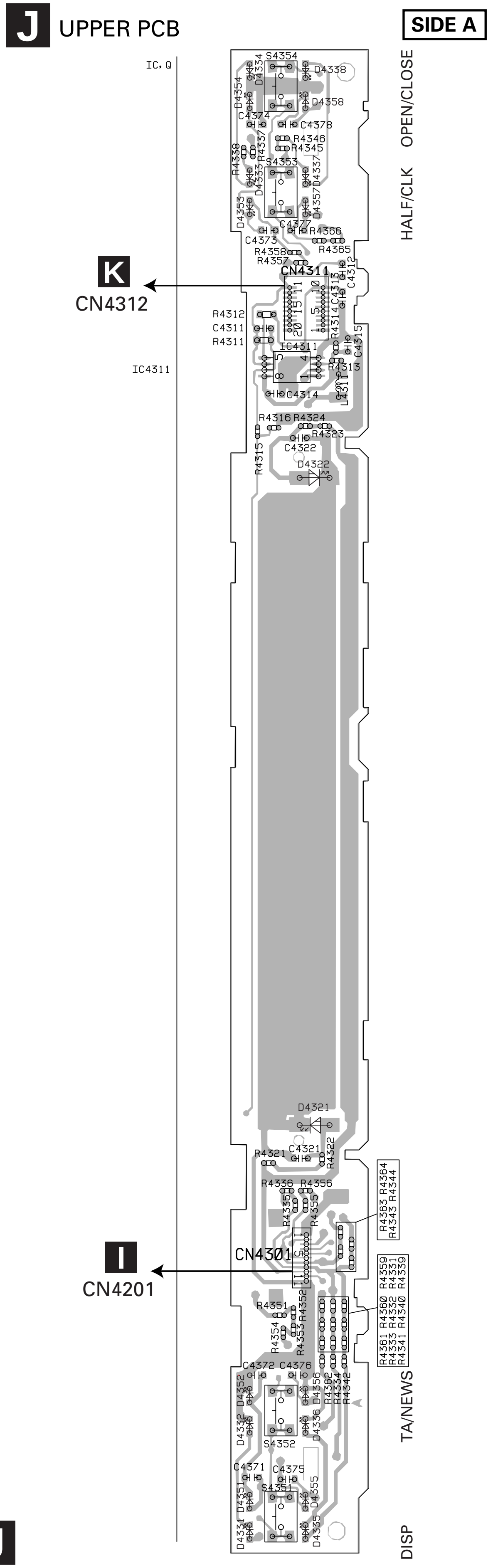
F

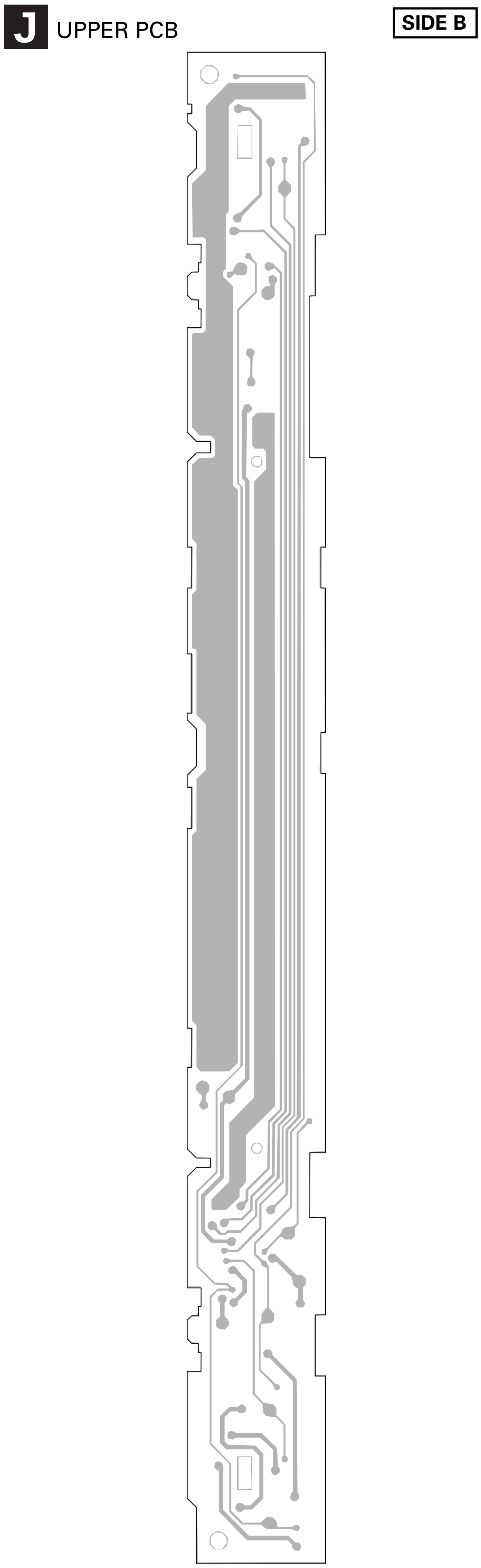


SIDE B


VM12
V18
CVBS1
ANB
ANG
ANR
V5
VG
VB
VR
VCOM
VFL2
VFL1

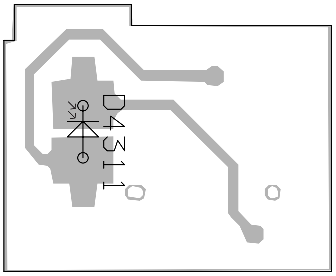
4.8 UPPER PCB


J
UPPER PCB
SIDE A
IC, Q
IC4311
K
CN4312
I
CN4201
CN4311
CN4301
IC4311
S4354
S4353
S4352
S4351
D4338
D4358
D4334
D4354
D4333
D4353
D4357
D4337
D4322
D4321
D4332
D4352
D4336
D4356
D4331
D4351
D4335
D4355
C4374
C4378
C4373
C4377
C4311
C4312
C4313
C4314
C4315
C4321
C4322
C4371
C4372
C4375
C4376
R4311
R4312
R4313
R4314
R4315
R4316
R4321
R4322
R4323
R4324
R4338
R4337
R4345
R4346
R4357
R4358
R4365
R4366
R4336
R4356
R4335
R4355
R4351
R4352
R4353
R4354
R4363 R4364
R4343 R4344
R4359
R4331
R4339
R4361 R4360 R4332 R4340
R4333 R4334 R4341 R4342
R4362
L4311
OPEN/CLOSE
HALF/CLK
TA/NEWS
DISP


J
UPPER PCB
SIDE B

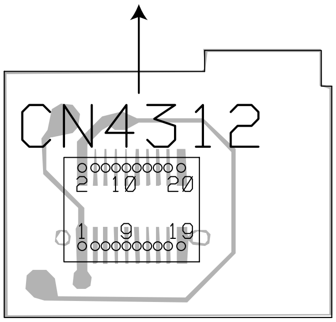
4.9 SENSE PCB

K SENSE PCB **SIDE A**



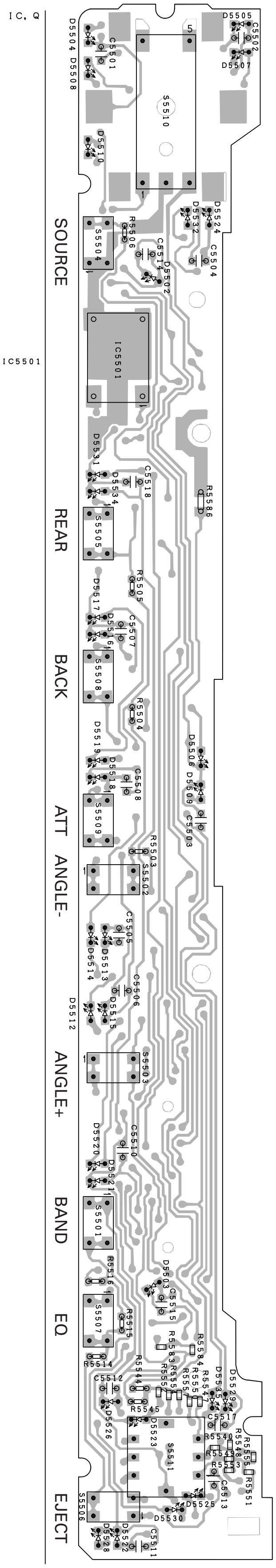
K SENSE PCB **SIDE B**

J CN4311

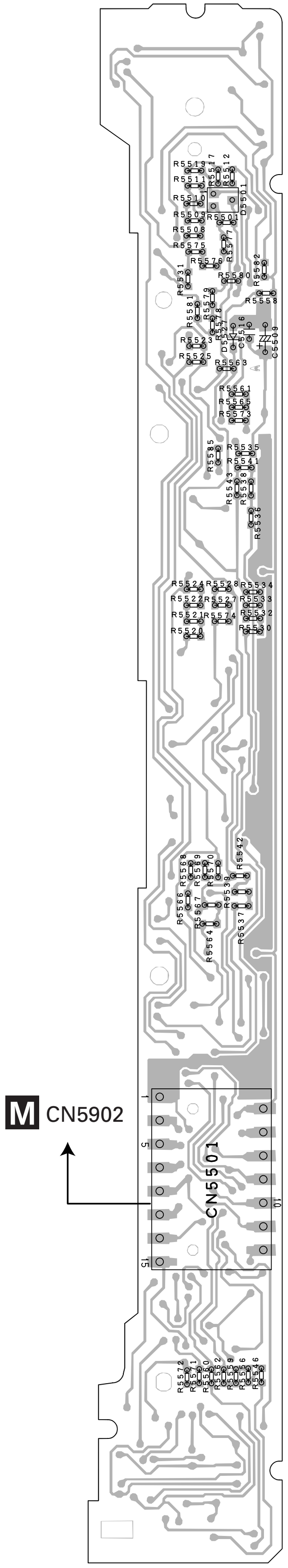

CN4312
2
10
20
1
9
19

4.10 GRILLE PCB

L GRILLE PCB **SIDE A**

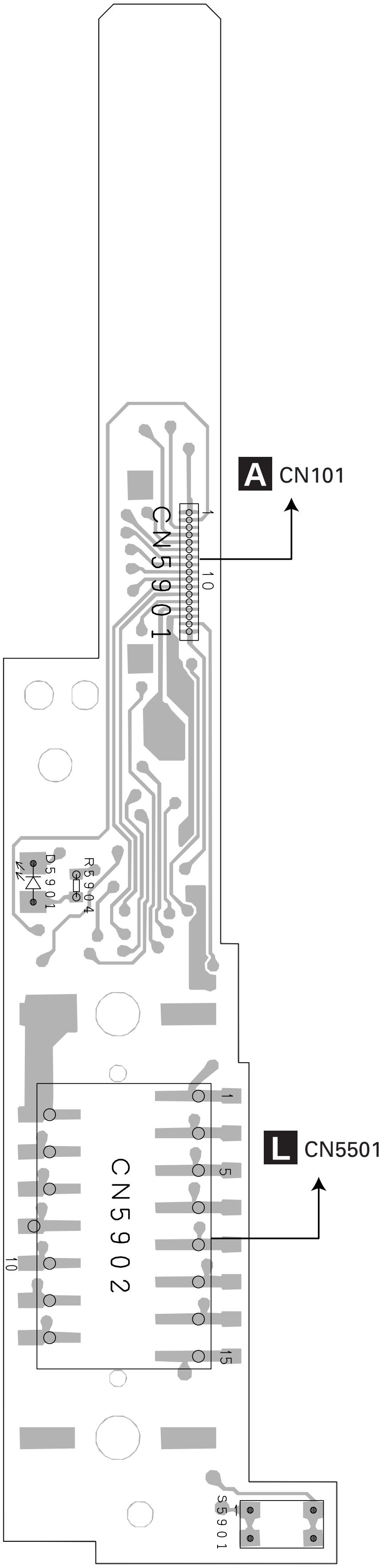

IC, Q
IC5501
SOURCE
REAR
BACK
ATT
ANGLE-
ANGLE+
BAND
EQ.
EJECT
S5510
S5504
S5505
S5508
S5509
S5502
S5503
S5501
S5507
S5511
S5506
IC5501
D5504
D5508
D5505
D5507
D5510
D5502
D5524
D5531
D5534
D5517
D5519
D5506
D5509
D5513
D5514
D5512
D5515
D5520
D5503
D5523
D5525
D5526
D5530
C5501
C5502
C5504
C5514
C5518
C5507
C5508
C5503
C5505
C5506
C5510
C5515
C5512
C5517
C5513
C5511
R5506
R5586
R5505
R5504
R5503
R5516
R5515
R5514
R5545
R5540
R5551
R5584
R5583

L GRILLE PCB **SIDE B**

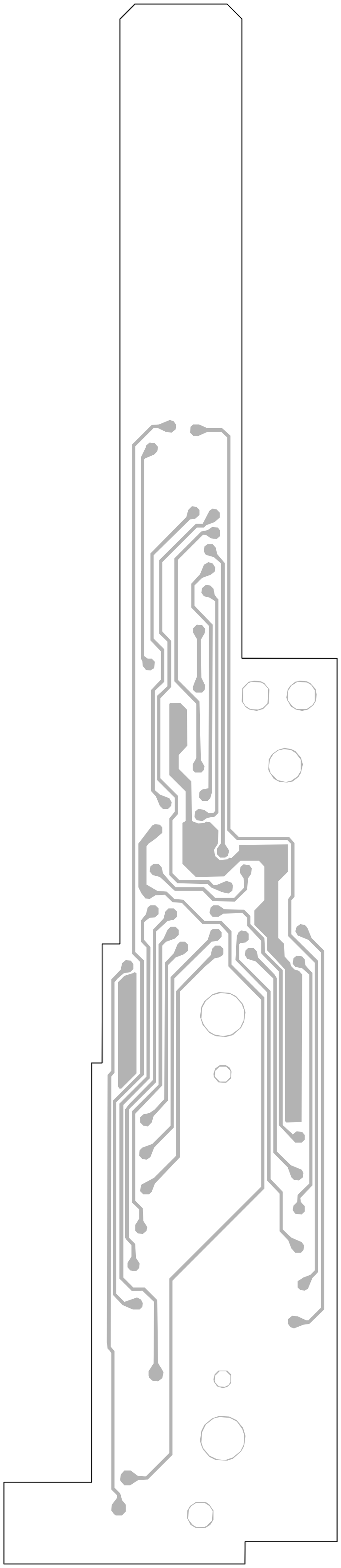

M CN5902
CN5501
1
5
10
15
D5501
R5519
R5511
R5510
R5509
R5508
R5575
R5517
R5512
R5501
R5577
R5576
R5531
R5580
R5582
R5558
R5581
R5523
R5525
R5563
C5509
R5561
R5565
R5573
R5585
R5535
R5541
R5543
R5538
R5536
R5524
R5528
R5534
R5522
R5527
R5533
R5521
R5574
R5532
R5520
R5530
R5542
R5566
R5567
R5564
R5539
R5537
R5572

4.11 PANEL PCB

M PANEL PCB **SIDE A**


A CN101
CN5901
1
10
R5904
D5901
L CN5501
CN5902
1
5
10
15
S5901

M PANEL PCB **SIDE B**

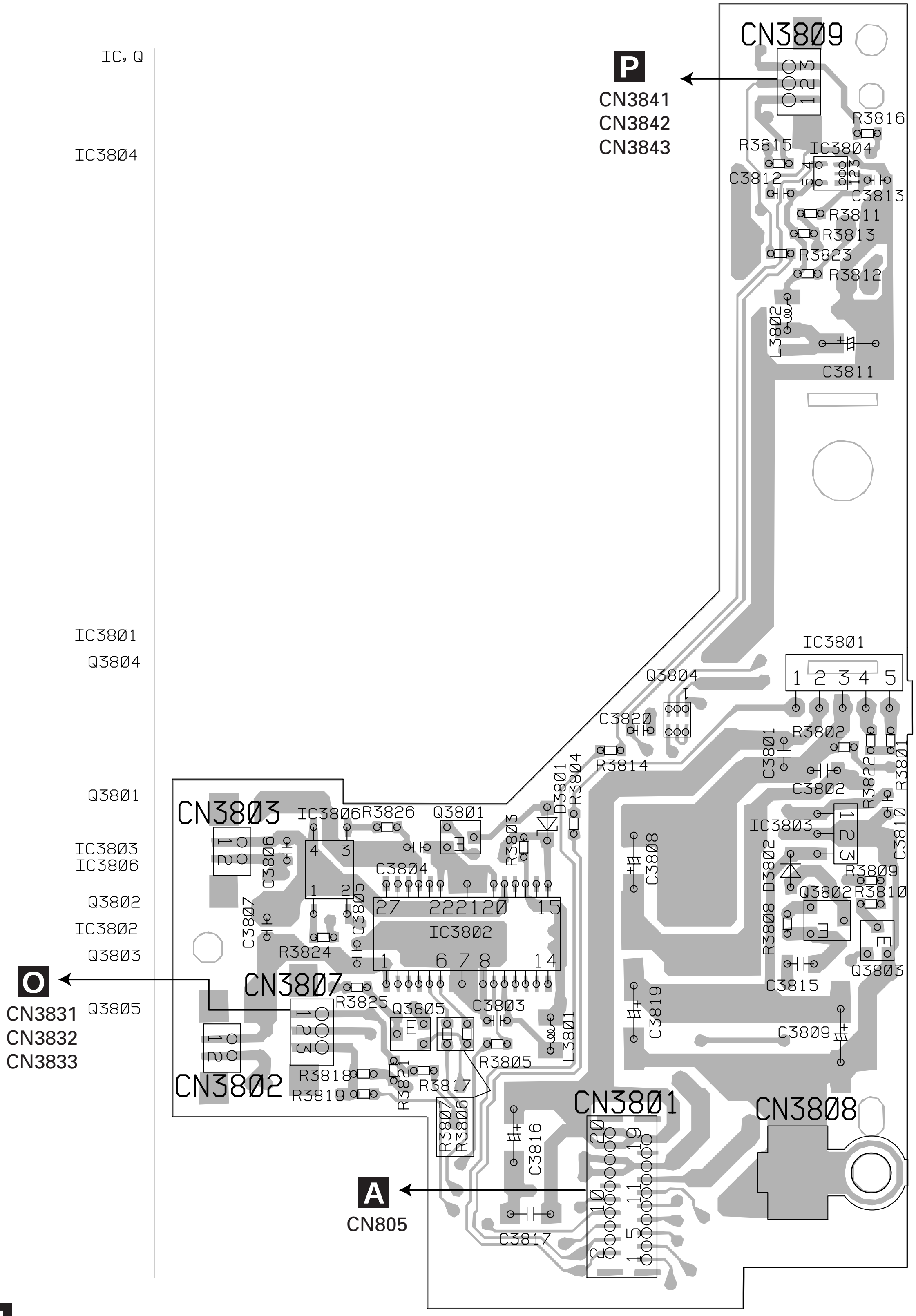


M

4.12 MAIN UNIT

N MAIN UNIT

SIDE A


IC, Q
IC3804
IC3801
Q3804
Q3801
IC3803
IC3806
Q3802
IC3802
Q3803
Q3805
P
CN3841
CN3842
CN3843
CN3809
R3816
R3815
IC3804
C3812
C3813
R3811
R3813
R3823
R3812
L3802
C3811
IC3801
Q3804
C3820
R3802
R3814
C3801
C3802
R3822
R3801
D3801
R3804
IC3803
C3810
D3802
R3809
Q3802
R3810
R3808
Q3803
C3815
C3808
C3819
C3809
CN3803
IC3806
R3826
Q3801
R3803
C3806
C3804
C3807
C3805
IC3802
R3824
O
CN3831
CN3832
CN3833
CN3807
R3825
Q3805
C3803
L3801
R3805
R3818
R3821
R3817
R3819
CN3802
R3807
R3806
CN3801
CN3808
C3816
C3817
A
CN805

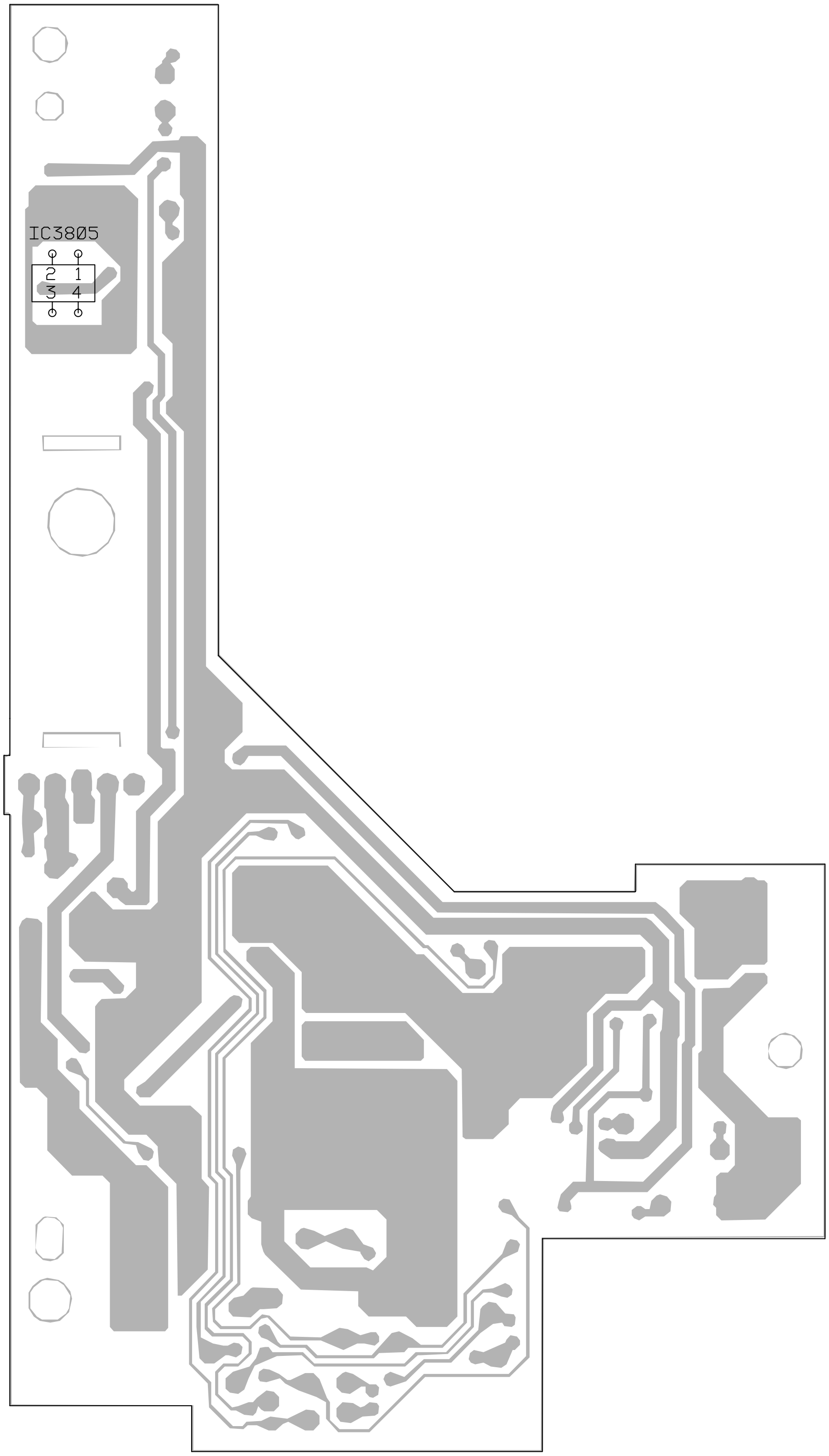
N

N MAIN UNIT

SIDE B

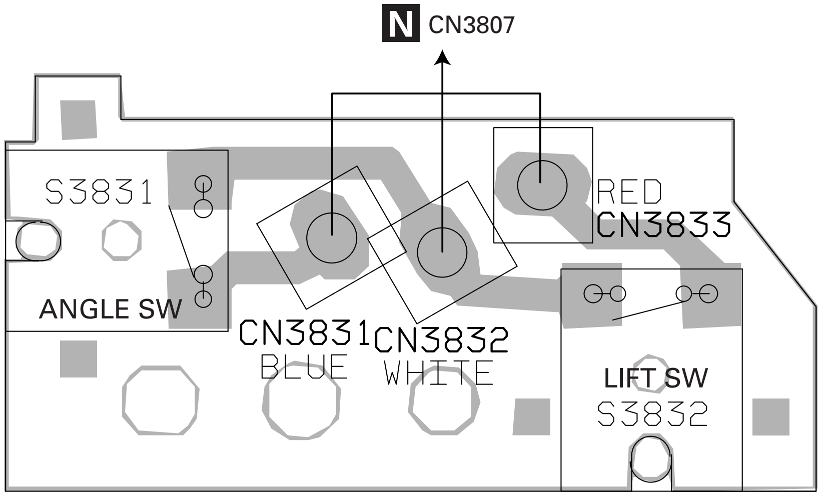
IC, Q

IC3805

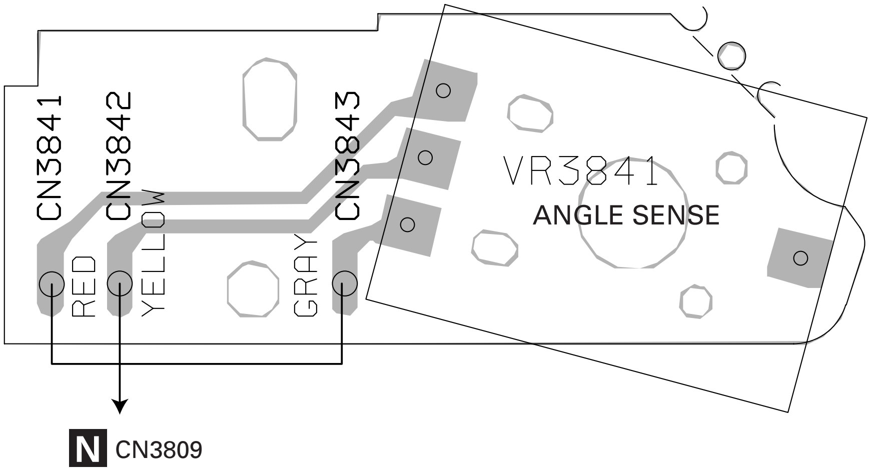

IC3805
2
1
3
4

4.13 SW UNIT AND VOLUME UNIT

O SW UNIT


N CN3807
S3831
ANGLE SW
CN3831
BLUE
CN3832
WHITE
RED
CN3833
LIFT SW
S3832

P VOLUME UNIT


CN3841
CN3842
CN3843
RED
YELLOW
GRAY
VR3841
ANGLE SENSE
N CN3809

O P

5. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

  Chip Resistor

  RS1/○S○○○J,RS1/○○S○○○J

  Chip Capacitor (except for CQS.....)

  CKS....., CCS....., CSZS.....

=====Circuit Symbol and No.===Part Name Part No.

Mother Unit

Consists of
Mother PCB
Relay PCB
Extension PCB

A B C

Unit Number : CWM8760(UC model)
Unit Name : Mother Unit

MISCELLANEOUS

IC	151	IC	TA2050F
IC	152	IC	TA2050F
IC	153	IC	TA2050F
IC	154	IC	HA12187FP
IC	155	IC	TC4S81F
IC	201	IC	TC74VHCT08AFT
IC	202	IC	SM5304AV
IC	203	IC	TC74VHC08FT
IC	301	IC	NJM4558V
IC	302	IC	NJM4558V
IC	303	IC	NJM4558V
IC	304	IC	NJM2068V
IC	305	IC	PML009A
IC	306	IC	NJM4558V
IC	307	IC	NJM4558V
IC	308	IC	PAL007A
IC	309	IC	PA2028A
IC	501	IC	NJM2137V
IC	502	IC	NJM2137V
IC	503	IC	NJM2137V
IC	504	IC	NJM2137V
IC	505	IC	NJM2137V
IC	506	IC	CXA2089Q
IC	507	IC	BA7623F
IC	601	IC	PE5348A
IC	602	IC	S-80841CNUA-B82
IC	801	IC	BA00BC0WFP
IC	803	IC	BP5451
IC	804	IC	S-818A33AUC-BGN
IC	805	IC	AN8011S
IC	806	IC	BA00BC0WFP
IC	807	IC	S-812C50AUA-C3E
IC	971	IC	TC7WT125FU
Q	101	Transistor	DTC124EU
Q	102	Transistor	2SA1576
Q	103	Transistor	IMD2A
Q	104	Transistor	DTC114EU
Q	105	Transistor	DTA114EU
Q	106	Transistor	DTC144EU
Q	107	Transistor	2SC4081
Q	108	Transistor	2SC4081
Q	109	Transistor	DTC144EU
Q	110	Transistor	2SA1577
Q	111	Transistor	UMH1N
Q	112	Transistor	2SC4081
Q	113	Transistor	DTC124EU
Q	115	Transistor	2SA1577
Q	116	Transistor	DTC144EU
Q	117	Transistor	2SA1577
Q	118	Transistor	DTC124EU
Q	119	Transistor	2SA1576
Q	120	Transistor	DTC124EU
Q	126	Transistor	2SC2412K
Q	151	Transistor	2SC4081
Q	152	Transistor	2SA1576
Q	153	Transistor	DTC124EU
Q	201	Transistor	DTC323TU
Q	203	Transistor	DTC323TU
Q	205	Transistor	2SA1576
Q	206	Transistor	DTC124EU
Q	207	Transistor	IMD2A
Q	301	Transistor	2SC2412K
Q	302	Transistor	DTC323TU
Q	303	Transistor	DTC323TU
Q	304	Transistor	DTC323TU
Q	305	Transistor	IMD2A
Q	306	Transistor	2SA1576
Q	307	Transistor	DTC124EU
Q	308	Transistor	2SA1576
Q	309	Transistor	DTC124EU
Q	310	Transistor	2SC4081
Q	311	Transistor	DTC323TU
Q	312	Transistor	DTC323TU
Q	313	Transistor	DTC323TU
Q	314	Transistor	DTC323TU
Q	315	Transistor	DTC323TU
Q	316	Transistor	DTC323TU
Q	317	Transistor	DTC144EU
Q	318	Transistor	IMD2A
Q	319	Transistor	IMD2A
Q	501	Transistor	2SC4081
Q	502	Transistor	2SC4081
Q	503	Transistor	2SC4081
Q	504	Transistor	2SC4081
Q	505	Transistor	2SC4081
Q	601	Transistor	DTC124EU
Q	602	Transistor	2SC4081
Q	701	Transistor	2SA1576
Q	702	Transistor	IMX1
Q	703	Transistor	DTC114EU
Q	704	Transistor	2SA1576
Q	801	Transistor	2SD1767
Q	802	Transistor	IMD2A
Q	803	Transistor	2SA1797
Q	804	Transistor	DTC124EU

=====Circuit Symbol and No.		===Part Name	Part No.
Q	805	Transistor	DTC124EU
Q	806	Transistor	2SD1767
Q	807	Transistor	DTC124EU
Q	808	Transistor	IMD2A
Q	811	Transistor	2SA1797
Q	815	Transistor	2SD1767
Q	816	Transistor	2SA1577
Q	817	Transistor	DTC124EU
Q	818	Transistor	DTC124EU
Q	819	Transistor	2SA1797
Q	820	Transistor	2SA1797
Q	821	Transistor	DTC114EU
Q	822	Transistor	2SJ529S
Q	824	Transistor	2SC4081
Q	826	Transistor	2SJ529S
Q	827	Transistor	2SJ529S
Q	828	Transistor	2SA1797
Q	829	Transistor	DTC124EU
Q	830	Transistor	DTC124EU
Q	832	Transistor	2SA1576
Q	833	Transistor	2SD1767
Q	834	Transistor	2SA1576
Q	835	Transistor	DTC124EU
Q	838	Transistor	DTC124EU
Q	839	Transistor	2SA1576
Q	840	Transistor	DTC124EU
Q	841	Transistor	2SB1184F5
Q	842	Transistor	2SD1767
Q	843	Transistor	DTC114EU
Q	844	Transistor	2SA1615-Z
Q	851	Transistor	2SD2375
Q	852	Transistor	IMD2A
Q	854	Transistor	2SA1577
Q	855	Transistor	DTC124EU
Q	903	Transistor	2SA1797
Q	904	Transistor	DTC124EU
D	101	Diode	UDZS5R6(B)
D	102	Diode Network	DA204U
D	103	Diode Network	DA204U
D	104	Diode Network	DA204U
D	105	Diode Network	DA204U
D	106	Diode Network	DA204U
D	107	Diode Network	DA204U
D	108	Diode	1SS355
D	109	Diode	1SS355
D	110	Diode Network	DA204U
D	151	Diode	HZU2R7(B1)
D	152	Diode	HZU2R7(B1)
D	153	Diode	HZU2R7(B1)
D	154	Diode	HZU2R7(B1)
D	155	Diode	HZU2R7(B1)
D	156	Diode	HZU2R7(B1)
D	157	Diode	UDZS5R6(B)
D	158	Diode	UDZS5R6(B)
D	159	Diode	UDZS5R6(B)
D	160	Diode	UDZS5R6(B)
D	161	Diode	HZU2R7(B1)
D	162	Diode	HZU2R7(B1)
D	163	Diode	HZU2R7(B1)
D	164	Diode	HZU2R7(B1)
D	165	Diode	UDZS5R6(B)
D	166	Diode Network	DA204U
D	167	Diode Network	DA204U
D	302	Diode	MA111
D	303	Diode	DAN202U

=====Circuit Symbol and No.		===Part Name	Part No.
D	304	Diode	DAN202U
D	305	Diode	DAN202U
D	306	Diode	UDZS8R2(B)
D	307	Diode	DAN202U
D	500	Diode	UDZ12(B)
D	601	Diode	MA111
D	602	Diode	DAN202U
D	701	Diode	DAN202U
D	702	Diode	HZU6R8(B3)
D	703	Diode	S1G-6904G2P
D	704	Diode	S1G-6904G2P
D	705	Diode	S1G-6904G2P
D	706	Diode	UDZS7R5(B)
D	707	Diode	DAN202U
D	708	Diode	S1G-6904G2P
D	709	Diode	S1G-6904G2P
D	801	Diode	UDZS5R6(B)
D	802	Diode	HZU8R2(B1)
D	803	Diode	HZU5R6(B2)
D	805	Diode	UDZS5R6(B)
D	806	Diode	S2G-6600
D	807	Diode	S1G-6904G2P
D	808	Diode	RB063L-30
D	809	Diode	MA111
D	812	Diode	RB063L-30
D	813	Diode	SC802-06
D	814	Diode	RB063L-30
D	815	Diode	S2G-6600
D	816	Diode	RB063L-30
D	817	Diode	HZU9R1(B1)
D	819	Diode	DAN202U
D	820	Diode	UDZS20(B)
D	851	Diode	HZU10(B1)
D	852	Diode	DAN202U
D	853	Diode	S2G-6600
L	101	Inductor	CTF1399
L	151	Inductor	LCTC2R2K1608
L	201	Coil	CTH1295
L	202	Inductor	CTF1399
L	203	Inductor	CTF1305
L	204	Inductor	CTF1305
L	205	Inductor	CTF1399
L	206	Inductor	CTF1399
L	207	Inductor	CTF1379
L	301	Inductor	CTF1399
L	302	Inductor	CTF1399
L	303	Inductor	CTF1399
L	304	Inductor	LCTA2R2J2520
L	305	Inductor	CTF1399
L	307	Inductor	CTF1379
L	308	Inductor	CTF1379
L	310	Inductor	CTF1399
L	311	Inductor	CTF1399
L	312	Inductor	LCTA101J2520
L	501	Inductor	CTF1399
L	502	Inductor	CTF1399
L	503	Inductor	CTF1399
L	504	Inductor	CTF1399
L	505	Inductor	CTF1399
L	506	Inductor	LCTA100J2520
L	507	Inductor	CTF1383
L	508	Inductor	CTF1383
L	509	Inductor	LCTA150J2520
L	601	Inductor	LCTA2R2J2520
L	602	Inductor	CTF1306

=====Circuit Symbol and No.===Part Name			Part No.
L	603	Inductor	CTF1306
L	604	Inductor	CTF1306
L	701	Inductor	LCTC2R2K1608
L	702	Inductor	LCTC2R2K1608
L	801	Coil	CTH1295
L	803	Coil	CTH1295
L	804	Inductor	CTF1379
L	805	Coil	CTH1295
L	806	Coil	CTH1295
L	807	Coil	CTH1267
L	812	Coil	CTH1295
L	813	Choke Coil 270μH	CTH1263
L	901	Inductor	CTF1395
L	902	Inductor	CTF1379
L	971	Inductor	CTF1379
X	601	Resonator 18.874MHz	CSS1622
VR	501	Semi-fixed 3.3kΩ(B)	CCP1393
VR	801	Semi-fixed 10kΩ(B)	CCP1396
FU	151	Fuse 1A	CEK1280
FU	154	Fuse 5A	CEK1289
FU	155	Fuse 5A	CEK1289
FU	156	Fuse 5A	CEK1289
FU	157	Fuse 5A	CEK1289
FU	158	Fuse 5A	CEK1289
FU	201	Fuse 1A	CEK1280
FU	202	Fuse 1A	CEK1280
FU	203	Fuse 1A	CEK1280
FU	204	Fuse 1A	CEK1280
FU	205	Fuse 1A	CEK1280
FU	206	Fuse 1A	CEK1280
FU	207	Fuse 1A	CEK1280
FU	301	Fuse 5A	CEK1289
FU	302	Fuse 4A	CEK1288
FU	701	Fuse 5A	CEK1289
FU	801	Fuse 250mA	CEK1276
FU	802	Fuse 3A	CEK1286
FU	803	Fuse 1.25A	CEK1281
FU	804	Fuse 1.75A	CEK1283
FU	805	Fuse 1.75A	CEK1283
FU	806	Fuse 3A	CEK1286
FU	807	Fuse 2.3A	ICPS2R3
FU	808	Fuse 1A	CEK1280
FU	901	Fuse 1A	CEK1280
EF	801	EMI Filter	CCG1142
BZ	101	Buzzer	CPV1063

RESISTORS

=====Circuit Symbol and No.===Part Name			Part No.
R	101		RS1/16S332J
R	102		RS1/16S332J
R	103		RS1/16S223J
R	104		RAB4C222J
R	105		RS1/16S102J
R	106		RS1/16S102J
R	107		RS1/16S222J
R	109		RS1/16S104J
R	110		RS1/16S103J
R	111		RS1/16S102J
R	112		RS1/16S102J
R	113		RS1/16S223J
R	114		RS1/16S473J
R	115		RS1/16S472J
R	116		RS1/16S472J
R	117		RS1/16S223J
R	118		RS1/16S472J
R	119		RS1/16S473J
R	120		RS1/16S473J
R	123		RS1/16S102J
R	124		RS1/16S103J
R	125		RS1/16S223J
R	126		RS1/16S472J
R	127		RS1/16S223J
R	128		RS1/16S472J
R	129		RS1/16S473J
R	130		RS1/16S332J
R	131		RS1/16S332J
R	136		RS1/16S0R0J
R	138		RS1/16S102J
R	139		RS1/16S472J
R	140		RS1/16S472J
R	141		RS1/16S822J
R	142		RS1/16S102J
R	144		RS1/16S223J
R	148		RS1/16S223J
R	149		RS1/16S223J
R	150		RS1/16S103J
R	151		RS1/16S223J
R	152		RS1/16S181J
R	153		RS1/16S181J
R	154		RS1/16S223J
R	155		RS1/16S681J
R	156		RS1/16S681J
R	157		RS1/16S150J
R	158		RS1/16S470J
R	159		RS1/16S222J
R	160		RS1/16S101J
R	161		RS1/16S151J
R	162		RS1/16S151J
R	163		RS1/16S151J
R	164		RS1/16S151J
R	165		RS1/16S151J
R	166		RS1/16S101J
R	167		RS1/16S151J
R	168		RS1/16S473J
R	169		RS1/16S473J
R	170		RS1/16S681J
R	171		RS1/16S681J
R	172		RS1/16S473J
R	173		RS1/16S102J
R	174		RS1/16S102J
R	175		RS1/16S123J
R	176		RS1/16S223J
R	177		RS1/16S123J
R	178		RS1/16S123J
R	179		RS1/16S223J
R	180		RS1/16S123J
R	181		RS1/16S223J
R	182		RS1/16S223J
R	183		RS1/16S181J
R	184		RS1/16S181J
R	185		RS1/16S102J
R	186		RS1/16S102J
R	187		RS1/16S332J
R	188		RS1/16S562J
R	189		RS1/16S102J
R	190		RS1/16S473J
R	192		RS1/16S151J
R	193		RS1/16S103J
R	194		RS1/16S151J
R	195		RS1/16S102J
R	196		RS1/16S473J
R	197		RS1/16S473J
R	198		RS1/16S102J

=====Circuit Symbol and No.===Part Name		Part No.	=====Circuit Symbol and No.===Part Name		Part No.
R	199	RS1/16S102J	R	355	RS1/16S103J
R	201	RAB4C102J	R	356	RS1/16S0R0J
R	202	RAB4C102J	R	359	RS1/16S0R0J
R	203	RS1/16S473J	R	360	RS1/16S0R0J
R	204	RS1/16S0R0J	R	361	RS1/16S0R0J
R	207	RS1/16S750J	R	362	RS1/16S0R0J
R	209	RS1/16S0R0J	R	363	RS1/16S0R0J
R	212	RS1/16S332J	R	364	RS1/16S223J
R	213	RS1/16S332J	R	365	RS1/16S103J
R	214	RS1/16S512J	R	366	RS1/16S471J
R	216	RS1/16S0R0J	R	367	RS1/16S471J
R	217	RS1/16S101J	R	368	RS1/16S223J
R	219	RS1/16S681J	R	369	RS1/16S103J
R	220	RS1/16S0R0J	R	370	RS1/16S223J
R	301	RS1/16S101J	R	371	RS1/16S103J
R	302	RS1/16S222J	R	372	RS1/16S221J
R	304	RS1/16S392J	R	373	RS1/16S103J
R	305	RS1/16S472J	R	374	RS1/16S820J
R	306	RS1/16S0R0J	R	375	RS1/16S820J
R	307	RS1/16S473J	R	376	RS1/16S101J
R	308	RS1/16S103J	R	377	RS1/16S473J
R	309	RS1/16S473J	R	378	RS1/16S103J
R	310	RS1/16S473J	R	379	RS1/16S820J
R	311	RS1/16S472J	R	380	RS1/16S223J
R	312	RS1/16S472J	R	381	RS1/16S820J
R	313	RS1/16S103J	R	382	RS1/16S820J
R	314	RS1/16S102J	R	383	RS1/16S223J
R	315	RS1/16S222J	R	384	RS1/16S471J
R	316	RS1/16S472J	R	385	RS1/16S223J
R	317	RS1/16S473J	R	386	RS1/16S223J
R	318	RS1/16S473J	R	387	RS1/16S471J
R	319	RS1/16S223J	R	388	RS1/16S471J
R	321	RS1/16S472J	R	389	RS1/16S471J
R	322	RS1/16S103J	R	390	RS1/16S820J
R	323	RS1/16S473J	R	391	RS1/16S223J
R	324	RS1/16S223J	R	392	RS1/16S223J
R	325	RS1/16S821J	R	393	RS1/16S471J
R	326	RS1/16S473J	R	394	RS1/16S471J
R	327	RS1/16S473J	R	395	RS1/16S0R0J
R	328	RS1/16S223J	R	396	RS1/16S0R0J
R	329	RS1/16S223J	R	397	RS1/16S0R0J
R	330	RS1/16S181J	R	503	RS1/16S472J
R	331	RS1/16S181J	R	504	RS1/16S750J
R	332	RS1/16S102J	R	506	RS1/16S472J
R	333	RS1/16S102J	R	507	RS1/16S472J
R	335	RS1/16S103J	R	508	RS1/16S750J
R	336	RS1/16S102J	R	509	RS1/16S750J
R	337	RS1/16S391J	R	512	RS1/16S750J
R	338	RS1/16S391J	R	514	RS1/16S472J
R	339	RS1/16S821J	R	515	RS1/16S472J
R	340	RS1/16S821J	R	516	RS1/16S0R0J
R	341	RS1/16S103J	R	517	RS1/16S472J
R	342	RS1/16S472J	R	518	RS1/16S102J
R	343	RS1/16S104J	R	519	RS1/16S101J
R	344	RS1/16S104J	R	520	RS1/16S472J
R	345	RS1/16S103J	R	521	RS1/16S472J
R	346	RS1/16S103J	R	522	RS1/16S102J
R	347	RS1/16S223J	R	523	RS1/16S472J
R	348	RS1/16S223J	R	524	RS1/16S472J
R	349	RS1/16S103J	R	525	RS1/16S472J
R	350	RS1/16S103J	R	526	RS1/16S102J
R	351	RS1/16S104J	R	527	RS1/16S101J
R	352	RS1/16S103J	R	528	RS1/16S472J
R	353	RS1/16S103J	R	529	RS1/16S472J
R	354	RS1/16S103J	R	530	RS1/16S472J

=====Circuit Symbol and No.===Part Name		Part No.
R	531	RS1/16S392J
R	532	RS1/16S472J
R	533	RS1/16S392J
R	534	RS1/16S472J
R	535	RS1/16S472J
R	536	RS1/16S472J
R	537	RS1/16S392J
R	538	RS1/16S472J
R	539	RS1/16S101J
R	540	RS1/16S472J
R	541	RS1/16S472J
R	542	RS1/16S102J
R	543	RS1/16S392J
R	544	RS1/16S472J
R	545	RS1/16S472J
R	546	RS1/16S472J
R	547	RS1/16S101J
R	548	RS1/16S102J
R	549	RS1/16S0R0J
R	550	RS1/16S0R0J
R	551	RS1/16S392J
R	552	RS1/16S472J
R	553	RS1/16S0R0J
R	554	RS1/16S562J
R	555	RS1/16S562J
R	556	RS1/16S562J
R	557	RS1/16S562J
R	558	RS1/16S0R0J
R	559	RS1/16S0R0J
R	561	RS1/16S0R0J
R	562	RS1/16S270J
R	564	RS1/16S102J
R	565	RS1/16S393J
R	566	RS1/16S152J
R	567	RS1/16S393J
R	568	RS1/16S473J
R	569	RS1/16S473J
R	601	RS1/16S104J
R	602	RS1/16S102J
R	603	RS1/16S473J
R	604	RS1/16S0R0J
R	605	RS1/16S0R0J
R	606	RS1/16S473J
R	607	RS1/16S473J
R	608	RS1/16S473J
R	609	RS1/16S473J
R	610	RS1/16S473J
R	611	RS1/16S473J
R	613	RS1/16S473J
R	614	RS1/16S473J
R	615	RAB4C102J
R	616	RAB4C102J
R	617	RAB4C102J
R	621	RAB4C102J
R	622	RS1/16S473J
R	623	RS1/16S473J
R	624	RS1/16S473J
R	625	RS1/16S473J
R	626	RS1/16S102J
R	627	RS1/16S221J
R	633	RS1/16S472J
R	634	RS1/16S473J
R	635	RS1/16S473J
R	636	RS1/16S473J
R	637	RS1/16S473J
R	638	RS1/16S473J
R	640	RS1/16S681J
R	642	RS1/16S681J
R	643	RS1/16S473J
R	644	RS1/16S102J
R	645	RS1/16S102J
R	646	RS1/16S102J
R	647	RS1/16S102J
R	648	RS1/16S473J
R	649	RS1/16S473J
R	650	RS1/16S473J
R	651	RS1/16S103J
R	652	RS1/16S473J
R	653	RAB4C102J
R	654	RS1/16S473J
R	655	RAB4C681J
R	656	RS1/16S102J
R	657	RS1/16S102J
R	658	RS1/16S681J
R	659	RS1/16S681J
R	660	RS1/16S472J
R	661	RS1/16S472J
R	662	RS1/16S473J
R	663	RS1/16S0R0J
R	664	RS1/16S473J
R	666	RS1/16S473J
R	668	RS1/16S473J
R	669	RS1/16S473J
R	670	RS1/16S101J
R	671	RS1/16S102J
R	672	RS1/16S473J
R	701	RS1/16S102J
R	702	RS1/16S473J
R	703	RS1/16S0R0J
R	704	RS1/16S473J
R	705	RS1/16S473J
R	706	RS1/16S103J
R	707	RS1/16S103J
R	708	RS1/16S473J
R	709	RS1/16S103J
R	710	RS1/16S104J
R	711	RS1/16S102J
R	712	RS1/16S472J
R	713	RS1/16S472J
R	714	RS1/16S473J
R	715	RS1/16S472J
R	716	RS1/16S153J
R	801	RS1/16S561J
R	802	RS1/16S332J
R	803	RS1/16S181J
R	805	RS1/16S102J
R	806	RS1/16S471J
R	807	RS1/16S471J
R	809	RS1/16S332J
R	812	RS1/16S391J
R	813	RS1/16S391J
R	821	RS1/16S391J
R	822	RS1/16S472J
R	823	RS1/16S222J
R	824	RS1/16S1203D
R	825	RS1/16S1502D
R	826	RS1/16S6802D
R	827	RS1/16S2201D
R	828	RS1/16S470J
R	829	RS1/16S470J

=====Circuit Symbol and No.===Part Name			Part No.
R	830		RS1/16S101J
R	831		RS1/16S101J
R	832		RS1/16S472J
R	833		RS1/16S560J
R	834		RS1/16S102J
R	835		RS1/16S473J
R	836		RS1/16S6200D
R	837		RS1/16S3602D
R	838		RS1/16S3901D
R	839		RS1/16S100J
R	840		RS1/16S0R0J
R	847		RS1/16S2203D
R	848		RS1/16S102J
R	850		RS1/16S103J
R	851		RS1/16S221J
R	852		RS1/16S272J
R	853		RS1/16S0R0J
R	855		RS1/16S6801D
R	856		RS1/16S1502D
R	857		RS1/16S272J
R	858		RS1/16S473J
R	860		RS1/16S6801D
R	861		RS1/16S102J
R	864		RS1/16S5602D
R	865		RS1/16S1002D
R	868		RS1/16S102J
R	870		RS1/16S102J
R	871		RS1/16S1503D
R	872		RS1/16S0R0J
R	873		RS1/16S8202D
R	874		RS1/16S3301D
R	875		RS1/16S473J
R	876		RS1/16S0R0J
R	877		RS1/16S472J
R	878		RS1/16S103J
R	879		RS1/16S472J
R	880		RS1/16S103J
R	882		RS1/16S151J
R	883		RS1/16S103J
R	884		RS1/16S103J
R	885		RS1/16S820J
R	886		RS1/16S471J
R	887		RS1/16S820J
R	888		RS1/10S301J
R	889		RS1/10S301J
R	890		RS1/16S153J
R	891		RS1/16S121J
R	892		RS1/16S151J
R	893		RS1/16S0R0J
R	894		RS1/16S222J
R	895		RS1/16S472J
R	896		RS1/16S392J
R	897		RS1/10S0R0J
R	898		RS1/10S0R0J
R	900		RS1/16S102J
R	913		RS1/16S332J
R	914		RS1/16S221J
R	915		RS1/16S221J
R	916		RS1/16S271J
R	917		RS1/16S271J
R	971		RS1/16S221J
R	972		RS1/16S621J
R	973		RS1/16S473J
R	974		RS1/16S361J
R	975		RS1/16S0R0J

CAPACITORS

=====Circuit Symbol and No.===Part Name			Part No.
C	101		CKSRYB103K50
C	102		CKSRYB104K16
C	103		CKSRYB104K16
C	104		CKSRYB103K50
C	105		CKSRYB104K16
C	106		CKSRYB104K16
C	151		CKSRYB104K16
C	152		CKSRYB471K50
C	153		CKSRYB104K16
C	154		CKSRYB104K16
C	155		CKSRYB104K16
C	156		CKSRYB104K16
C	157		CKSRYB105K6R3
C	158		CKSRYB105K6R3
C	159		CKSRYB105K6R3
C	160		CKSRYB105K6R3
C	161		CKSRYB105K6R3
C	162		CKSRYB105K6R3
C	163		CKSRYB105K6R3
C	164		CKSRYB105K6R3
C	165		CKSYB475K10
C	166		CKSRYB104K16
C	167	10µF/16V	CCH1442
C	168	10µF/16V	CCH1442
C	169		CKSRYB104K16
C	170	10µF/16V	CCH1442
C	171	10µF/16V	CCH1442
C	172	10µF/16V	CCH1442
C	173		CKSRYB104K16
C	174		CKSRYB104K16
C	175	10µF/16V	CCH1442
C	201		CEV221M4
C	202		CEV221M4
C	203		CKSYB106K6R3
C	205		CKSRYB102K50
C	206		CKSRYB102K50
C	207		CKSYB475K10
C	209		CEV220M6R3
C	210		CEV101M16
C	220		CKSRYB103K50
C	221		CKSRYB103K50
C	301	10µF/16V	CCH1442
C	302		CKSYB106K6R3
C	303		CKSQYB105K16
C	304		CKSQYB105K16
C	305	10µF/16V	CCH1442
C	306	10µF/16V	CCH1442
C	307		CCSRCH220J50
C	308		CKSYB475K10
C	309		CKSRYB102K50
C	310		CCSRCH220J50
C	311	4.7µF/35V	CCH1483
C	312	4.7µF/35V	CCH1483
C	313		CKSRYB104K16
C	314		CKSRYB104K16
C	315		CKSRYB104K16
C	316		CCSRCH101J50
C	317	10µF/16V	CCH1442
C	318		CKSRYB104K16
C	319		CKSRYB104K16
C	320		CKSRYB224K10
C	321		CKSRYB105K6R3
C	322		CKSRYB105K6R3
C	323		CKSRYB102K50
C	324		CKSRYB105K6R3

=====Circuit Symbol and No.===Part Name			Part No.
---	------	--	-------------------------
C	325		CKSRYB105K6R3
C	326	47μF/16V	CCH1413
C	327		CKSRYB224K10
C	328		CKSRYB104K16
C	329		CKSRYB105K6R3
C	330		CKSRYB105K6R3
C	331		CKSRYB105K6R3
C	332		CKSRYB105K6R3
C	333	47μF/16V	CCH1413
C	334		CKSYB475K10
C	335		CKSYB475K10
C	336		CKSYB475K10
C	337		CKSYB475K10
C	338		CKSYB475K10
C	339		CKSYB475K10
C	340		CKSYB475K10
C	341		CKSYB475K10
C	345		CCSRCH100D50
C	346		CCSRCH100D50
C	347	10μF/16V	CCH1442
C	348		CKSRYB104K16
C	349		CKSRYB104K16
C	350		CCSRCH100D50
C	351		CCSRCH100D50
C	352		CCSRCH100D50
C	353		CCSRCH100D50
C	354	10μF/16V	CCH1442
C	355		CKSYB475K10
C	356		CEVL101M10
C	357	4.7μF/35V	CCH1483
C	358		CKSQYB225K10
C	359		CKSQYB225K10
C	360		CKSQYB225K10
C	361		CKSQYB225K10
C	362		CKSQYB225K10
C	363		CKSQYB225K10
C	364		CKSRYB105K10
C	365		CKSRYB105K10
C	366		CKSRYB105K10
C	367		CKSRYB105K10
C	368		CKSRYB105K10
C	369		CKSRYB105K10
C	370		CKSRYB105K10
C	371		CKSRYB105K10
C	372	10μF/16V	CCH1442
C	373		CKSRYB105K10
C	374	33μF/25V	CCH1444
C	375		CKSYB684K16
C	376	10μF/16V	CCH1442
C	377	10μF/16V	CCH1442
C	378	10μF/16V	CCH1442
C	379	33μF/25V	CCH1444
C	380	33μF/25V	CCH1444
C	381		CKSRYB105K6R3
C	382	3300μF/16V	CCH1486
C	383	10μF/16V	CCH1442
C	384	10μF/16V	CCH1442
C	385	10μF/16V	CCH1442
C	386		CKSRYB222K50
C	387		CKSRYB222K50
C	388		CKSRYB222K50
C	389		CKSRYB222K50
C	390		CKSRYB222K50
C	391		CKSRYB222K50
C	392		CKSRYB104K16

=====Circuit Symbol and No.===Part Name			Part No.
---	------	--	-------------------------
C	393	10μF/16V	CCH1442
C	394		CKSYB475K10
C	395		CKSYB475K10
C	396		CKSRYB473K50
C	397		CKSRYB104K16
C	398		CKSRYB104K16
C	399		CKSRYB104K16
C	404	10μF/16V	CCG1138
C	501		CKSYB106K6R3
C	502		CKSYB106K6R3
C	503		CKSYB106K6R3
C	504		CKSYB106K6R3
C	505		CKSYB106K6R3
C	506		CKSYB106K6R3
C	507		CKSYB106K6R3
C	508		CKSYB106K6R3
C	509		CKSYB106K6R3
C	511		CCSRCH6R0D50
C	512		CKSRYB105K6R3
C	514		CCSRCH6R0D50
C	515		CKSRYB105K6R3
C	517		CKSRYB105K6R3
C	518		CCSRCH6R0D50
C	519		CKSRYB102K50
C	520		CKSYB106K6R3
C	521		CKSRYB104K16
C	522		CKSYB106K6R3
C	523		CKSRYB102K50
C	524		CKSYB106K6R3
C	525		CKSRYB104K16
C	526		CCSRCH6R0D50
C	527		CKSRYB102K50
C	528		CKSYB106K6R3
C	529		CKSRYB104K16
C	530		CKSRYB105K6R3
C	531		CKSRYB105K6R3
C	533		CCSRCH6R0D50
C	534		CKSRYB105K6R3
C	535		CKSRYB102K50
C	536		CKSRYB104K16
C	537		CKSRYB105K6R3
C	539		CKSRYB105K6R3
C	540		CKSRYB102K50
C	541		CKSYB106K6R3
C	542		CKSRYB104K16
C	543		CKSRYB105K6R3
C	544		CKSRYB105K6R3
C	545		CKSRYB105K6R3
C	546		CKSRYB105K6R3
C	547		CKSRYB105K6R3
C	548	10μF/16V	CCH1442
C	549		CKSRYB104K16
C	550		CKSRYB105K6R3
C	551		CEV221M4
C	552		CEV221M4
C	553		CEV221M4
C	554		CEV221M4
C	555		CEV101M16
C	556		CKSYB106K6R3
C	557		CKSYB106K6R3
C	558	10μF/16V	CCH1442
C	559		CKSYB106K6R3
C	560		CKSRYB223K50
C	601		CKSRYB105K6R3
C	602		CEV2R2M50

=====Circuit Symbol and No.		===Part Name	Part No.
C	603		CCSRCH101J50
C	604		CKSRYB105K6R3
C	605		CKSRYB105K6R3
C	606		CCSRCH7R0D50
C	607		CCSRCH7R0D50
C	608		CCSRCH100D50
C	609		CCSRCH100D50
C	672		CKSRYB104K16
C	701		CKSRYB103K50
C	702		CKSRYB104K16
C	703		CKSRYB105K10
C	704		CKSRYB104K16
C	705		CKSQYB104K25
C	706		CKSRYB104K16
C	707		CKSRYB104K16
C	801		CKSRYB104K16
C	802	47μF/16V	CCH1413
C	803		CKSRYB103K50
C	806	47μF/16V	CCH1413
C	810		CKSRYB104K16
C	811	47μF/16V	CCH1413
C	812		CKSRYB103K50
C	813		CKSRYB474K10
C	814	470μF/6.3V	CCH1437
C	815	0.22μF/3.5V	CCL1058
C	816		CKSRYB102K50
C	817		CKSRYB105K6R3
C	818	220μF/10V	CCH1409
C	819		CKSRYB102K50
C	820		CKSYB475K10
C	824		CEHAZL471M16
C	826		CKSYB225K16
C	827		CKSYB225K16
C	828		CEV1R0M50
C	829		CKSRYB102K50
C	830		CKSYB475K10
C	831		CKSRYB103K50
C	832		CCSRCH121J50
C	835		CKSYB475K16
C	836	2200μF/16V	CCH1405
C	838	470μF/6.3V	CCH1437
C	839	47μF/16V	CCH1413
C	840		CKSRYB474K10
C	841		CKSRYB104K16
C	842		CKSRYB104K16
C	843		CKSYB475K16
C	844		CEHAZL471M16
C	846	10μF/16V	CCH1442
C	847		CKSRYB103K50
C	848		CKSRYB103K50
C	849		CEV101M16
C	850	0.1μF/5.5V	CCL1059
C	851		CKSRYB103K50
C	852		CKSRYB103K50
C	853		CEV101M16
C	854		CKSRYB104K16
C	855		CKSRYB104K16
C	856	10μF/16V	CCH1442
C	857		CKSRYB102K50
C	858		CEV101M16
C	870		CKSYB225K16
C	874		CKSRYB104K16
C	878	100μF/16V	CCH1228
C	882	1000μF/16V	CCH1428
C	883	100μF/16V	CCH1228

=====Circuit Symbol and No.		===Part Name	Part No.
C	971		CCSRCH150J50
C	972		CKSRYB104K16
C	973		CKSYB106K6R3

Mother Unit

Consists of
Mother PCB
Relay PCB
Extension PCB

A **B** **C**

Unit Number : CWM8759(EW model)
Unit Name : Mother Unit

MISCELLANEOUS

IC	151	IC	TA2050F
IC	152	IC	TA2050F
IC	153	IC	TA2050F
IC	154	IC	HA12187FP
IC	155	IC	TC4S81F
IC	201	IC	TC74VHCT08AFT
IC	202	IC	SM5304AV
IC	203	IC	TC74VHC08FT
IC	301	IC	NJM4558V
IC	302	IC	NJM4558V
IC	303	IC	NJM4558V
IC	304	IC	NJM2068V
IC	305	IC	PML009A
IC	306	IC	NJM4558V
IC	307	IC	NJM4558V
IC	308	IC	PAL007A
IC	309	IC	PA2028A
IC	501	IC	NJM2137V
IC	502	IC	NJM2137V
IC	503	IC	NJM2137V
IC	504	IC	NJM2137V
IC	505	IC	NJM2137V
IC	506	IC	CXA2089Q
IC	507	IC	BA7623F
IC	601	IC	PE5347A
IC	602	IC	S-80841CNUA-B82
IC	801	IC	BA00BC0WFP
IC	803	IC	BP5451
IC	804	IC	S-818A33AUC-BGN
IC	805	IC	AN8011S
IC	806	IC	BA00BC0WFP
IC	807	IC	S-812C50AUA-C3E
IC	971	IC	TC7WT125FU
Q	101	Transistor	DTC124EU
Q	102	Transistor	2SA1576
Q	103	Transistor	IMD2A
Q	104	Transistor	DTC114EU
Q	105	Transistor	DTA114EU
Q	106	Transistor	DTC144EU
Q	107	Transistor	2SC4081
Q	108	Transistor	2SC4081
Q	109	Transistor	DTC144EU
Q	110	Transistor	2SA1577
Q	111	Transistor	UMH1N
Q	112	Transistor	2SC4081
Q	113	Transistor	DTC124EU
Q	115	Transistor	2SA1577
Q	116	Transistor	DTC144EU
Q	117	Transistor	2SA1577
Q	118	Transistor	DTC124EU

=====Circuit Symbol and No.===Part Name			Part No.
Q	119	Transistor	2SA1576
Q	120	Transistor	DTC124EU
Q	121	Transistor	DTC144EU
Q	122	Transistor	2SA1577
Q	124	Transistor	2SA1577
Q	125	Transistor	UMH1N
Q	126	Transistor	2SC2412K
Q	151	Transistor	2SC4081
Q	152	Transistor	2SA1576
Q	153	Transistor	DTC124EU
Q	201	Transistor	DTC323TU
Q	203	Transistor	DTC323TU
Q	205	Transistor	2SA1576
Q	206	Transistor	DTC124EU
Q	207	Transistor	IMD2A
Q	301	Transistor	2SC2412K
Q	302	Transistor	DTC323TU
Q	303	Transistor	DTC323TU
Q	304	Transistor	DTC323TU
Q	305	Transistor	IMD2A
Q	306	Transistor	2SA1576
Q	307	Transistor	DTC124EU
Q	308	Transistor	2SA1576
Q	309	Transistor	DTC124EU
Q	310	Transistor	2SC4081
Q	311	Transistor	DTC323TU
Q	312	Transistor	DTC323TU
Q	313	Transistor	DTC323TU
Q	314	Transistor	DTC323TU
Q	315	Transistor	DTC323TU
Q	316	Transistor	DTC323TU
Q	317	Transistor	DTC144EU
Q	318	Transistor	IMD2A
Q	319	Transistor	IMD2A
Q	501	Transistor	2SC4081
Q	502	Transistor	2SC4081
Q	503	Transistor	2SC4081
Q	504	Transistor	2SC4081
Q	505	Transistor	2SC4081
Q	601	Transistor	DTC124EU
Q	602	Transistor	2SC4081
Q	701	Transistor	2SA1576
Q	702	Transistor	IMX1
Q	703	Transistor	DTC114EU
Q	704	Transistor	2SA1576
Q	801	Transistor	2SD1767
Q	802	Transistor	IMD2A
Q	803	Transistor	2SA1797
Q	804	Transistor	DTC124EU
Q	805	Transistor	DTC124EU
Q	806	Transistor	2SD1767
Q	807	Transistor	DTC124EU
Q	808	Transistor	IMD2A
Q	811	Transistor	2SA1797
Q	815	Transistor	2SD1767
Q	816	Transistor	2SA1577
Q	817	Transistor	DTC124EU
Q	818	Transistor	DTC124EU
Q	819	Transistor	2SA1797
Q	820	Transistor	2SA1797
Q	821	Transistor	DTC114EU
Q	822	Transistor	2SJ529S
Q	824	Transistor	2SC4081
Q	826	Transistor	2SJ529S
Q	827	Transistor	2SJ529S

=====Circuit Symbol and No.===Part Name			Part No.
Q	828	Transistor	2SA1797
Q	829	Transistor	DTC124EU
Q	830	Transistor	DTC124EU
Q	832	Transistor	2SA1576
Q	833	Transistor	2SD1767
Q	834	Transistor	2SA1576
Q	835	Transistor	DTC124EU
Q	838	Transistor	DTC124EU
Q	839	Transistor	2SA1576
Q	840	Transistor	DTC124EU
Q	841	Transistor	2SB1184F5
Q	842	Transistor	2SD1767
Q	843	Transistor	DTC114EU
Q	844	Transistor	2SA1615-Z
Q	851	Transistor	2SD2375
Q	852	Transistor	IMD2A
Q	854	Transistor	2SA1577
Q	855	Transistor	DTC124EU
Q	903	Transistor	2SA1797
Q	904	Transistor	DTC124EU
D	101	Diode	UDZS5R6(B)
D	102	Diode Network	DA204U
D	103	Diode Network	DA204U
D	104	Diode Network	DA204U
D	105	Diode Network	DA204U
D	106	Diode Network	DA204U
D	107	Diode Network	DA204U
D	108	Diode	1SS355
D	109	Diode	1SS355
D	110	Diode Network	DA204U
D	151	Diode	HZU2R7(B1)
D	152	Diode	HZU2R7(B1)
D	153	Diode	HZU2R7(B1)
D	154	Diode	HZU2R7(B1)
D	155	Diode	HZU2R7(B1)
D	156	Diode	HZU2R7(B1)
D	157	Diode	UDZS5R6(B)
D	158	Diode	UDZS5R6(B)
D	159	Diode	UDZS5R6(B)
D	160	Diode	UDZS5R6(B)
D	161	Diode	HZU2R7(B1)
D	162	Diode	HZU2R7(B1)
D	163	Diode	HZU2R7(B1)
D	164	Diode	HZU2R7(B1)
D	165	Diode	UDZS5R6(B)
D	166	Diode Network	DA204U
D	167	Diode Network	DA204U
D	302	Diode	MA111
D	303	Diode	DAN202U
D	304	Diode	DAN202U
D	305	Diode	DAN202U
D	306	Diode	UDZS8R2(B)
D	307	Diode	DAN202U
D	500	Diode	UDZ12(B)
D	601	Diode	MA111
D	602	Diode	DAN202U
D	701	Diode	DAN202U
D	702	Diode	HZU6R8(B3)
D	703	Diode	S1G-6904G2P
D	704	Diode	S1G-6904G2P
D	705	Diode	S1G-6904G2P
D	706	Diode	UDZS7R5(B)
D	707	Diode	DAN202U
D	708	Diode	S1G-6904G2P
D	709	Diode	S1G-6904G2P

=====Circuit Symbol and No.===Part Name			Part No.
D	801	Diode	UDZS5R6(B)
D	802	Diode	HZU8R2(B1)
D	803	Diode	HZU5R6(B2)
D	805	Diode	UDZS5R6(B)
D	806	Diode	S2G-6600
D	807	Diode	S1G-6904G2P
D	808	Diode	RB063L-30
D	809	Diode	MA111
D	812	Diode	RB063L-30
D	813	Diode	SC802-06
D	814	Diode	RB063L-30
D	815	Diode	S2G-6600
D	816	Diode	RB063L-30
D	817	Diode	HZU9R1(B1)
D	819	Diode	DAN202U
D	820	Diode	UDZS20(B)
D	851	Diode	HZU10(B1)
D	852	Diode	DAN202U
D	853	Diode	S2G-6600
L	101	Inductor	CTF1399
L	151	Inductor	LCTC2R2K1608
L	201	Coil	CTH1295
L	202	Inductor	CTF1399
L	203	Inductor	CTF1305
L	204	Inductor	CTF1305
L	205	Inductor	CTF1399
L	206	Inductor	CTF1399
L	207	Inductor	CTF1379
L	301	Inductor	CTF1399
L	302	Inductor	CTF1399
L	303	Inductor	CTF1399
L	304	Inductor	LCTA2R2J2520
L	305	Inductor	CTF1399
L	307	Inductor	CTF1379
L	308	Inductor	CTF1379
L	310	Inductor	CTF1399
L	311	Inductor	CTF1399
L	312	Inductor	LCTA101J2520
L	501	Inductor	CTF1399
L	502	Inductor	CTF1399
L	503	Inductor	CTF1399
L	504	Inductor	CTF1399
L	505	Inductor	CTF1399
L	506	Inductor	LCTA100J2520
L	507	Inductor	CTF1383
L	508	Inductor	CTF1383
L	509	Inductor	LCTA150J2520
L	601	Inductor	LCTA2R2J2520
L	602	Inductor	CTF1306
L	603	Inductor	CTF1306
L	604	Inductor	CTF1306
L	701	Inductor	LCTC2R2K1608
L	702	Inductor	LCTC2R2K1608
L	801	Coil	CTH1295
L	803	Coil	CTH1295
L	804	Inductor	CTF1379
L	805	Coil	CTH1295
L	806	Coil	CTH1295
L	807	Coil	CTH1267
L	812	Coil	CTH1295
L	813	Choke Coil 270μH	CTH1263
L	901	Inductor	CTF1395
L	902	Inductor	CTF1379
L	971	Inductor	CTF1379
X	601	Resonator18.874MHz	CSS1622

=====Circuit Symbol and No.===Part Name			Part No.
VR	501	Semi-fixed 3.3kΩ(B)	CCP1393
VR	801	Semi-fixed10kΩ(B)	CCP1396
FU	151	Fuse 1A	CEK1280
FU	154	Fuse 5A	CEK1289
FU	155	Fuse 5A	CEK1289
FU	156	Fuse 5A	CEK1289
FU	157	Fuse 5A	CEK1289
FU	158	Fuse 5A	CEK1289
FU	201	Fuse 1A	CEK1280
FU	202	Fuse 1A	CEK1280
FU	203	Fuse 1A	CEK1280
FU	204	Fuse 1A	CEK1280
FU	205	Fuse 1A	CEK1280
FU	206	Fuse 1A	CEK1280
FU	207	Fuse 1A	CEK1280
FU	301	Fuse 5A	CEK1289
FU	302	Fuse 4A	CEK1288
FU	701	Fuse 5A	CEK1289
FU	801	Fuse 250mA	CEK1276
FU	802	Fuse 3A	CEK1286
FU	803	Fuse 1.25A	CEK1281
FU	804	Fuse 1.75A	CEK1283
FU	805	Fuse 1.75A	CEK1283
FU	806	Fuse 3A	CEK1286
FU	807	Fuse 2.3A	ICPS2R3
FU	808	Fuse 1A	CEK1280
FU	901	Fuse 1A	CEK1280
EF	801	EMI Filter	CCG1142
BZ	101	Buzzer	CPV1063

RESISTORS

R	101		RS1/16S332J
R	102		RS1/16S332J
R	103		RS1/16S223J
R	104		RAB4C222J
R	105		RS1/16S102J
R	106		RS1/16S102J
R	107		RS1/16S222J
R	109		RS1/16S104J
R	110		RS1/16S103J
R	111		RS1/16S102J
R	112		RS1/16S102J
R	113		RS1/16S223J
R	114		RS1/16S473J
R	115		RS1/16S472J
R	116		RS1/16S472J
R	117		RS1/16S223J
R	118		RS1/16S472J
R	119		RS1/16S473J
R	120		RS1/16S473J
R	123		RS1/16S102J
R	124		RS1/16S103J
R	125		RS1/16S223J
R	126		RS1/16S472J
R	127		RS1/16S223J
R	128		RS1/16S472J
R	129		RS1/16S473J
R	130		RS1/16S332J
R	131		RS1/16S332J
R	132		RS1/16S223J
R	133		RS1/16S472J
R	134		RS1/16S103J
R	135		RS1/16S223J
R	137		RS1/16S472J
R	138		RS1/16S102J
R	139		RS1/16S472J

=====Circuit Symbol and No.===Part Name			Part No.
---	------	--	-------------------------
R	140		RS1/16S472J
R	141		RS1/16S822J
R	142		RS1/16S102J
R	144		RS1/16S223J
R	148		RS1/16S223J
R	149		RS1/16S223J
R	150		RS1/16S103J
R	151		RS1/16S223J
R	152		RS1/16S181J
R	153		RS1/16S181J
R	154		RS1/16S223J
R	155		RS1/16S681J
R	156		RS1/16S681J
R	157		RS1/16S150J
R	158		RS1/16S470J
R	159		RS1/16S222J
R	160		RS1/16S101J
R	161		RS1/16S151J
R	162		RS1/16S151J
R	163		RS1/16S151J
R	164		RS1/16S151J
R	165		RS1/16S151J
R	166		RS1/16S101J
R	167		RS1/16S151J
R	168		RS1/16S473J
R	169		RS1/16S473J
R	170		RS1/16S681J
R	171		RS1/16S681J
R	172		RS1/16S473J
R	173		RS1/16S102J
R	174		RS1/16S102J
R	175		RS1/16S123J
R	176		RS1/16S223J
R	177		RS1/16S123J
R	178		RS1/16S123J
R	179		RS1/16S223J
R	180		RS1/16S123J
R	181		RS1/16S223J
R	182		RS1/16S223J
R	183		RS1/16S181J
R	184		RS1/16S181J
R	185		RS1/16S102J
R	186		RS1/16S102J
R	187		RS1/16S332J
R	188		RS1/16S562J
R	189		RS1/16S102J
R	190		RS1/16S473J
R	192		RS1/16S151J
R	193		RS1/16S103J
R	194		RS1/16S151J
R	195		RS1/16S102J
R	196		RS1/16S473J
R	197		RS1/16S473J
R	198		RS1/16S102J
R	199		RS1/16S102J
R	201		RAB4C102J
R	202		RAB4C102J
R	203		RS1/16S473J
R	204		RS1/16S0R0J
R	207		RS1/16S750J
R	209		RS1/16S0R0J
R	212		RS1/16S332J
R	213		RS1/16S332J
R	214		RS1/16S512J
R	216		RS1/16S0R0J

=====Circuit Symbol and No.===Part Name			Part No.
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R	217		RS1/16S101J
R	219		RS1/16S681J
R	220		RS1/16S0R0J
R	301		RS1/16S101J
R	302		RS1/16S222J
R	304		RS1/16S392J
R	305		RS1/16S472J
R	306		RS1/16S0R0J
R	307		RS1/16S473J
R	308		RS1/16S103J
R	309		RS1/16S473J
R	310		RS1/16S473J
R	311		RS1/16S472J
R	312		RS1/16S472J
R	313		RS1/16S103J
R	314		RS1/16S102J
R	315		RS1/16S222J
R	316		RS1/16S472J
R	317		RS1/16S473J
R	318		RS1/16S473J
R	319		RS1/16S223J
R	321		RS1/16S472J
R	322		RS1/16S103J
R	323		RS1/16S473J
R	324		RS1/16S223J
R	325		RS1/16S821J
R	326		RS1/16S473J
R	327		RS1/16S473J
R	328		RS1/16S223J
R	329		RS1/16S223J
R	330		RS1/16S181J
R	331		RS1/16S181J
R	332		RS1/16S102J
R	333		RS1/16S102J
R	335		RS1/16S103J
R	336		RS1/16S102J
R	337		RS1/16S391J
R	338		RS1/16S391J
R	339		RS1/16S821J
R	340		RS1/16S821J
R	341		RS1/16S103J
R	342		RS1/16S472J
R	343		RS1/16S104J
R	344		RS1/16S104J
R	345		RS1/16S103J
R	346		RS1/16S103J
R	347		RS1/16S223J
R	348		RS1/16S223J
R	349		RS1/16S103J
R	350		RS1/16S103J
R	351		RS1/16S104J
R	352		RS1/16S103J
R	353		RS1/16S103J
R	354		RS1/16S103J
R	355		RS1/16S103J
R	356		RS1/16S0R0J
R	359		RS1/16S0R0J
R	360		RS1/16S0R0J
R	361		RS1/16S0R0J
R	362		RS1/16S0R0J
R	363		RS1/16S0R0J
R	364		RS1/16S223J
R	365		RS1/16S103J
R	366		RS1/16S471J
R	367		RS1/16S471J

=====Circuit Symbol and No.===Part Name		Part No.
R	368	RS1/16S223J
R	369	RS1/16S103J
R	370	RS1/16S223J
R	371	RS1/16S103J
R	372	RS1/16S221J
R	373	RS1/16S103J
R	374	RS1/16S820J
R	375	RS1/16S820J
R	376	RS1/16S101J
R	377	RS1/16S473J
R	378	RS1/16S103J
R	379	RS1/16S820J
R	380	RS1/16S223J
R	381	RS1/16S820J
R	382	RS1/16S820J
R	383	RS1/16S223J
R	384	RS1/16S471J
R	385	RS1/16S223J
R	386	RS1/16S223J
R	387	RS1/16S471J
R	388	RS1/16S471J
R	389	RS1/16S471J
R	390	RS1/16S820J
R	391	RS1/16S223J
R	392	RS1/16S223J
R	393	RS1/16S471J
R	394	RS1/16S471J
R	395	RS1/16S0R0J
R	396	RS1/16S0R0J
R	397	RS1/16S0R0J
R	503	RS1/16S472J
R	504	RS1/16S750J
R	506	RS1/16S472J
R	507	RS1/16S472J
R	508	RS1/16S750J
R	509	RS1/16S750J
R	512	RS1/16S750J
R	514	RS1/16S472J
R	515	RS1/16S472J
R	516	RS1/16S0R0J
R	517	RS1/16S472J
R	518	RS1/16S102J
R	519	RS1/16S101J
R	520	RS1/16S472J
R	521	RS1/16S472J
R	522	RS1/16S102J
R	523	RS1/16S472J
R	524	RS1/16S472J
R	525	RS1/16S472J
R	526	RS1/16S102J
R	527	RS1/16S101J
R	528	RS1/16S472J
R	529	RS1/16S472J
R	530	RS1/16S472J
R	531	RS1/16S392J
R	532	RS1/16S472J
R	533	RS1/16S392J
R	534	RS1/16S472J
R	535	RS1/16S472J
R	536	RS1/16S472J
R	537	RS1/16S392J
R	538	RS1/16S472J
R	539	RS1/16S101J
R	540	RS1/16S472J
R	541	RS1/16S472J
R	542	RS1/16S102J
R	543	RS1/16S392J
R	544	RS1/16S472J
R	545	RS1/16S472J
R	546	RS1/16S472J
R	547	RS1/16S101J
R	548	RS1/16S102J
R	549	RS1/16S0R0J
R	550	RS1/16S0R0J
R	551	RS1/16S392J
R	552	RS1/16S472J
R	553	RS1/16S0R0J
R	554	RS1/16S562J
R	555	RS1/16S562J
R	556	RS1/16S562J
R	557	RS1/16S562J
R	558	RS1/16S0R0J
R	559	RS1/16S0R0J
R	561	RS1/16S0R0J
R	562	RS1/16S270J
R	564	RS1/16S102J
R	565	RS1/16S393J
R	566	RS1/16S152J
R	567	RS1/16S393J
R	568	RS1/16S473J
R	569	RS1/16S473J
R	601	RS1/16S104J
R	602	RS1/16S102J
R	603	RS1/16S473J
R	604	RS1/16S0R0J
R	605	RS1/16S0R0J
R	606	RS1/16S473J
R	607	RS1/16S473J
R	608	RS1/16S473J
R	609	RS1/16S473J
R	610	RS1/16S473J
R	611	RS1/16S473J
R	613	RS1/16S473J
R	614	RS1/16S473J
R	615	RAB4C102J
R	616	RAB4C102J
R	617	RAB4C102J
R	618	RS1/16S101J
R	619	RS1/16S101J
R	620	RS1/16S101J
R	621	RAB4C102J
R	622	RS1/16S473J
R	623	RS1/16S473J
R	624	RS1/16S473J
R	625	RS1/16S473J
R	626	RS1/16S102J
R	627	RS1/16S221J
R	633	RS1/16S472J
R	634	RS1/16S473J
R	635	RS1/16S473J
R	636	RS1/16S473J
R	637	RS1/16S473J
R	638	RS1/16S473J
R	640	RS1/16S681J
R	642	RS1/16S681J
R	643	RS1/16S473J
R	644	RS1/16S102J
R	645	RS1/16S102J
R	646	RS1/16S102J
R	647	RS1/16S102J

=====Circuit Symbol and No.===Part Name			Part No.
R	648		RS1/16S473J
R	649		RS1/16S473J
R	650		RS1/16S473J
R	651		RS1/16S103J
R	652		RS1/16S473J
R	653		RAB4C102J
R	654		RS1/16S473J
R	655		RAB4C681J
R	656		RS1/16S102J
R	657		RS1/16S102J
R	658		RS1/16S681J
R	659		RS1/16S681J
R	660		RS1/16S472J
R	661		RS1/16S472J
R	662		RS1/16S473J
R	663		RS1/16S0R0J
R	664		RS1/16S473J
R	666		RS1/16S473J
R	668		RS1/16S473J
R	669		RS1/16S473J
R	670		RS1/16S101J
R	671		RS1/16S102J
R	672		RS1/16S473J
R	701		RS1/16S102J
R	702		RS1/16S473J
R	703		RS1/16S0R0J
R	704		RS1/16S473J
R	705		RS1/16S473J
R	706		RS1/16S103J
R	707		RS1/16S103J
R	708		RS1/16S473J
R	709		RS1/16S103J
R	710		RS1/16S104J
R	711		RS1/16S102J
R	712		RS1/16S472J
R	713		RS1/16S472J
R	714		RS1/16S473J
R	715		RS1/16S472J
R	716		RS1/16S153J
R	801		RS1/16S561J
R	802		RS1/16S332J
R	803		RS1/16S181J
R	805		RS1/16S102J
R	806		RS1/16S471J
R	807		RS1/16S471J
R	809		RS1/16S332J
R	812		RS1/16S391J
R	813		RS1/16S391J
R	821		RS1/16S391J
R	822		RS1/16S472J
R	823		RS1/16S222J
R	824		RS1/16S1203D
R	825		RS1/16S1502D
R	826		RS1/16S6802D
R	827		RS1/16S2201D
R	828		RS1/16S470J
R	829		RS1/16S470J
R	830		RS1/16S101J
R	831		RS1/16S101J
R	832		RS1/16S472J
R	833		RS1/16S560J
R	834		RS1/16S102J
R	835		RS1/16S473J
R	836		RS1/16S6200D
R	837		RS1/16S3602D

=====Circuit Symbol and No.===Part Name			Part No.
R	838		RS1/16S3901D
R	839		RS1/16S100J
R	840		RS1/16S0R0J
R	847		RS1/16S2203D
R	848		RS1/16S102J
R	850		RS1/16S103J
R	851		RS1/16S221J
R	852		RS1/16S272J
R	853		RS1/16S0R0J
R	855		RS1/16S6801D
R	856		RS1/16S1502D
R	857		RS1/16S272J
R	858		RS1/16S473J
R	860		RS1/16S6801D
R	861		RS1/16S102J
R	864		RS1/16S5602D
R	865		RS1/16S1002D
R	868		RS1/16S102J
R	870		RS1/16S102J
R	871		RS1/16S1503D
R	872		RS1/16S0R0J
R	873		RS1/16S8202D
R	874		RS1/16S3301D
R	875		RS1/16S473J
R	876		RS1/16S0R0J
R	877		RS1/16S472J
R	878		RS1/16S103J
R	879		RS1/16S472J
R	880		RS1/16S103J
R	882		RS1/16S151J
R	883		RS1/16S103J
R	884		RS1/16S103J
R	885		RS1/16S820J
R	886		RS1/16S471J
R	887		RS1/16S820J
R	888		RS1/10S301J
R	889		RS1/10S301J
R	890		RS1/16S153J
R	891		RS1/16S121J
R	892		RS1/16S151J
R	893		RS1/16S0R0J
R	894		RS1/16S222J
R	895		RS1/16S472J
R	896		RS1/16S392J
R	897		RS1/10S0R0J
R	898		RS1/10S0R0J
R	900		RS1/16S102J
R	913		RS1/16S332J
R	914		RS1/16S221J
R	915		RS1/16S221J
R	916		RS1/16S271J
R	917		RS1/16S271J
R	971		RS1/16S221J
R	972		RS1/16S621J
R	973		RS1/16S473J
R	974		RS1/16S361J
R	975		RS1/16S0R0J

CAPACITORS

C	101		CKSRYB103K50
C	102		CKSRYB104K16
C	103		CKSRYB104K16
C	104		CKSRYB103K50
C	105		CKSRYB104K16

=====Circuit Symbol and No.		===Part Name	Part No.
C	106		CKSRYB104K16
C	107		CKSRYB104K16
C	108		CKSRYB104K16
C	151		CKSRYB104K16
C	152		CKSRYB471K50
C	153		CKSRYB104K16
C	154		CKSRYB104K16
C	155		CKSRYB104K16
C	156		CKSRYB104K16
C	157		CKSRYB105K6R3
C	158		CKSRYB105K6R3
C	159		CKSRYB105K6R3
C	160		CKSRYB105K6R3
C	161		CKSRYB105K6R3
C	162		CKSRYB105K6R3
C	163		CKSRYB105K6R3
C	164		CKSRYB105K6R3
C	165		CKSYB475K10
C	166		CKSRYB104K16
C	167	10μF/16V	CCH1442
C	168	10μF/16V	CCH1442
C	169		CKSRYB104K16
C	170	10μF/16V	CCH1442
C	171	10μF/16V	CCH1442
C	172	10μF/16V	CCH1442
C	173		CKSRYB104K16
C	174		CKSRYB104K16
C	175	10μF/16V	CCH1442
C	201		CEV221M4
C	202		CEV221M4
C	203		CKSYB106K6R3
C	205		CKSRYB102K50
C	206		CKSRYB102K50
C	207		CKSYB475K10
C	209		CEV220M6R3
C	210		CEV101M16
C	220		CKSRYB103K50
C	221		CKSRYB103K50
C	301	10μF/16V	CCH1442
C	302		CKSYB106K6R3
C	303		CKSQYB105K16
C	304		CKSQYB105K16
C	305	10μF/16V	CCH1442
C	306	10μF/16V	CCH1442
C	307		CCSRCH220J50
C	308		CKSYB475K10
C	309		CKSRYB102K50
C	310		CCSRCH220J50
C	311	4.7μF/35V	CCH1483
C	312	4.7μF/35V	CCH1483
C	313		CKSRYB104K16
C	314		CKSRYB104K16
C	315		CKSRYB104K16
C	316		CCSRCH101J50
C	317	10μF/16V	CCH1442
C	318		CKSRYB104K16
C	319		CKSRYB104K16
C	320		CKSRYB224K10
C	321		CKSRYB105K6R3
C	322		CKSRYB105K6R3
C	323		CKSRYB102K50
C	324		CKSRYB105K6R3
C	325		CKSRYB105K6R3
C	326	47μF/16V	CCH1413
C	327		CKSRYB224K10
C	328		CKSRYB104K16
C	329		CKSRYB105K6R3
C	330		CKSRYB105K6R3
C	331		CKSRYB105K6R3
C	332		CKSRYB105K6R3
C	333	47μF/16V	CCH1413
C	334		CKSYB475K10
C	335		CKSYB475K10
C	336		CKSYB475K10
C	337		CKSYB475K10
C	338		CKSYB475K10
C	339		CKSYB475K10
C	340		CKSYB475K10
C	341		CKSYB475K10
C	345		CCSRCH100D50
C	346		CCSRCH100D50
C	347	10μF/16V	CCH1442
C	348		CKSRYB104K16
C	349		CKSRYB104K16
C	350		CCSRCH100D50
C	351		CCSRCH100D50
C	352		CCSRCH100D50
C	353		CCSRCH100D50
C	354	10μF/16V	CCH1442
C	355		CKSYB475K10
C	356		CEVL101M10
C	357	4.7μF/35V	CCH1483
C	358		CKSQYB225K10
C	359		CKSQYB225K10
C	360		CKSQYB225K10
C	361		CKSQYB225K10
C	362		CKSQYB225K10
C	363		CKSQYB225K10
C	364		CKSRYB105K10
C	365		CKSRYB105K10
C	366		CKSRYB105K10
C	367		CKSRYB105K10
C	368		CKSRYB105K10
C	369		CKSRYB105K10
C	370		CKSRYB105K10
C	371		CKSRYB105K10
C	372	10μF/16V	CCH1442
C	373		CKSRYB105K10
C	374	33μF/25V	CCH1444
C	375		CKSYB684K16
C	376	10μF/16V	CCH1442
C	377	10μF/16V	CCH1442
C	378	10μF/16V	CCH1442
C	379	33μF/25V	CCH1444
C	380	33μF/25V	CCH1444
C	381		CKSRYB105K6R3
C	382	3300μF/16V	CCH1486
C	383	10μF/16V	CCH1442
C	384	10μF/16V	CCH1442
C	385	10μF/16V	CCH1442
C	386		CKSRYB222K50
C	387		CKSRYB222K50
C	388		CKSRYB222K50
C	389		CKSRYB222K50
C	390		CKSRYB222K50
C	391		CKSRYB222K50
C	392		CKSRYB104K16
C	393	10μF/16V	CCH1442
C	394		CKSYB475K10
C	395		CKSYB475K10

=====Circuit Symbol and No.===Part Name			Part No.
C	396		CKSRYB473K50
C	397		CKSRYB104K16
C	398		CKSRYB104K16
C	399		CKSRYB104K16
C	404	10μF/16V	CCG1138
C	501		CKSYB106K6R3
C	502		CKSYB106K6R3
C	503		CKSYB106K6R3
C	504		CKSYB106K6R3
C	505		CKSYB106K6R3
C	506		CKSYB106K6R3
C	507		CKSYB106K6R3
C	508		CKSYB106K6R3
C	509		CKSYB106K6R3
C	511		CCSRCH6R0D50
C	512		CKSRYB105K6R3
C	514		CCSRCH6R0D50
C	515		CKSRYB105K6R3
C	517		CKSRYB105K6R3
C	518		CCSRCH6R0D50
C	519		CKSRYB102K50
C	520		CKSYB106K6R3
C	521		CKSRYB104K16
C	522		CKSYB106K6R3
C	523		CKSRYB102K50
C	524		CKSYB106K6R3
C	525		CKSRYB104K16
C	526		CCSRCH6R0D50
C	527		CKSRYB102K50
C	528		CKSYB106K6R3
C	529		CKSRYB104K16
C	530		CKSRYB105K6R3
C	531		CKSRYB105K6R3
C	533		CCSRCH6R0D50
C	534		CKSRYB105K6R3
C	535		CKSRYB102K50
C	536		CKSRYB104K16
C	537		CKSRYB105K6R3
C	539		CKSRYB105K6R3
C	540		CKSRYB102K50
C	541		CKSYB106K6R3
C	542		CKSRYB104K16
C	543		CKSRYB105K6R3
C	544		CKSRYB105K6R3
C	545		CKSRYB105K6R3
C	546		CKSRYB105K6R3
C	547		CKSRYB105K6R3
C	548	10μF/16V	CCH1442
C	549		CKSRYB104K16
C	550		CKSRYB105K6R3
C	551		CEV221M4
C	552		CEV221M4
C	553		CEV221M4
C	554		CEV221M4
C	555		CEV101M16
C	556		CKSYB106K6R3
C	557		CKSYB106K6R3
C	558	10μF/16V	CCH1442
C	559		CKSYB106K6R3
C	560		CKSRYB223K50
C	601		CKSRYB105K6R3
C	602		CEV2R2M50
C	603		CCSRCH101J50
C	604		CKSRYB105K6R3
C	605		CKSRYB105K6R3
C	606		CCSRCH7R0D50
C	607		CCSRCH7R0D50
C	608		CCSRCH100D50
C	609		CCSRCH100D50
C	672		CKSRYB104K16
C	701		CKSRYB103K50
C	702		CKSRYB104K16
C	703		CKSRYB105K10
C	704		CKSRYB104K16
C	705		CKSQYB104K25
C	706		CKSRYB104K16
C	707		CKSRYB104K16
C	801		CKSRYB104K16
C	802	47μF/16V	CCH1413
C	803		CKSRYB103K50
C	806	47μF/16V	CCH1413
C	810		CKSRYB104K16
C	811	47μF/16V	CCH1413
C	812		CKSRYB103K50
C	813		CKSRYB474K10
C	814	470μF/6.3V	CCH1437
C	815	0.22μF/3.5V	CCL1058
C	816		CKSRYB102K50
C	817		CKSRYB105K6R3
C	818	220μF/10V	CCH1409
C	819		CKSRYB102K50
C	820		CKSYB475K10
C	824		CEHAZL471M16
C	826		CKSYB225K16
C	827		CKSYB225K16
C	828		CEV1R0M50
C	829		CKSRYB102K50
C	830		CKSYB475K10
C	831		CKSRYB103K50
C	832		CCSRCH121J50
C	835		CKSYB475K16
C	836	2200μF/16V	CCH1405
C	838	470μF/6.3V	CCH1437
C	839	47μF/16V	CCH1413
C	840		CKSRYB474K10
C	841		CKSRYB104K16
C	842		CKSRYB104K16
C	843		CKSYB475K16
C	844		CEHAZL471M16
C	846	10μF/16V	CCH1442
C	847		CKSRYB103K50
C	848		CKSRYB103K50
C	849		CEV101M16
C	850	0.1μF/5.5V	CCL1059
C	851		CKSRYB103K50
C	852		CKSRYB103K50
C	853		CEV101M16
C	854		CKSRYB104K16
C	855		CKSRYB104K16
C	856	10μF/16V	CCH1442
C	857		CKSRYB102K50
C	858		CEV101M16
C	870		CKSYB225K16
C	874		CKSRYB104K16
C	878	100μF/16V	CCH1228
C	882	1000μF/16V	CCH1428
C	883	100μF/16V	CCH1228
C	971		CCSRCH150J50
C	972		CKSRYB104K16
C	973		CKSYB106K6R3

Mother Unit

Consists of
Mother PCB
Relay PCB
Extension PCB

A B C

Unit Number : CWM8761(RC model)
Unit Number : CWM8762(RD model)
Unit Name : Mother Unit

MISCELLANEOUS

Circuit Symbol and No.		Part Name	Part No.
IC	151	IC	TA2050F
IC	152	IC	TA2050F
IC	154	IC	HA12187FP
IC	201	IC	TC74VHCT08AFT
IC	202	IC	SM5304AV
IC	203	IC	TC74VHC08FT
IC	303	IC	NJM4558V
IC	305	IC	PML009A
IC	308	IC	PAL007A
IC	309	IC	PA2028A
IC	501	IC	NJM2137V
IC	502	IC	NJM2137V
IC	504	IC	NJM2137V
IC	505	IC	NJM2137V
IC	506	IC	CXA2089Q
IC	507	IC	BA7623F
IC	601	IC	PE5348A
IC	602	IC	S-80841CNUA-B82
IC	801	IC	BA00BC0WFP
IC	803	IC	BP5451
IC	804	IC	S-818A33AUC-BGN
IC	805	IC	AN8011S
IC	806	IC	BA00BC0WFP
IC	807	IC	S-812C50AUA-C3E
IC	971	IC	TC7WT125FU
Q	101	Transistor	DTC124EU
Q	102	Transistor	2SA1576
Q	103	Transistor	IMD2A
Q	105	Transistor	DTA114EU
Q	106	Transistor	DTC144EU
Q	107	Transistor	2SC4081
Q	108	Transistor	2SC4081
Q	109	Transistor	DTC144EU
Q	110	Transistor	2SA1577
Q	111	Transistor	UMH1N
Q	113	Transistor	DTC124EU
Q	115	Transistor	2SA1577
Q	116	Transistor	DTC144EU
Q	117	Transistor	2SA1577
Q	118	Transistor	DTC124EU
Q	119	Transistor	2SA1576
Q	120	Transistor	DTC124EU
Q	126	Transistor	2SC2412K
Q	152	Transistor	2SA1576
Q	153	Transistor	DTC124EU
Q	201	Transistor	DTC323TU
Q	203	Transistor	DTC323TU
Q	205	Transistor	2SA1576
Q	206	Transistor	DTC124EU
Q	207	Transistor	IMD2A
Q	301	Transistor	2SC2412K
Q	303	Transistor	DTC323TU
Q	304	Transistor	DTC323TU
Q	305	Transistor	IMD2A
Q	307	Transistor	DTC124EU
Q	308	Transistor	2SA1576
Q	309	Transistor	DTC124EU
Q	310	Transistor	2SC4081
Q	311	Transistor	DTC323TU
Q	312	Transistor	DTC323TU
Q	313	Transistor	DTC323TU
Q	314	Transistor	DTC323TU
Q	315	Transistor	DTC323TU
Q	316	Transistor	DTC323TU
Q	317	Transistor	DTC144EU
Q	318	Transistor	IMD2A
Q	319	Transistor	IMD2A
Q	501	Transistor	2SC4081
Q	502	Transistor	2SC4081
Q	504	Transistor	2SC4081
Q	505	Transistor	2SC4081
Q	601	Transistor	DTC124EU
Q	602	Transistor	2SC4081
Q	701	Transistor	2SA1576
Q	702	Transistor	IMX1
Q	703	Transistor	DTC114EU
Q	704	Transistor	2SA1576
Q	801	Transistor	2SD1767
Q	802	Transistor	IMD2A
Q	803	Transistor	2SA1797
Q	804	Transistor	DTC124EU
Q	805	Transistor	DTC124EU
Q	806	Transistor	2SD1767
Q	807	Transistor	DTC124EU
Q	808	Transistor	IMD2A
Q	811	Transistor	2SA1797
Q	815	Transistor	2SD1767
Q	816	Transistor	2SA1577
Q	817	Transistor	DTC124EU
Q	818	Transistor	DTC124EU
Q	819	Transistor	2SA1797
Q	820	Transistor	2SA1797
Q	821	Transistor	DTC114EU
Q	822	Transistor	2SJ529S
Q	824	Transistor	2SC4081
Q	826	Transistor	2SJ529S
Q	827	Transistor	2SJ529S
Q	828	Transistor	2SA1797
Q	829	Transistor	DTC124EU
Q	830	Transistor	DTC124EU
Q	832	Transistor	2SA1576
Q	833	Transistor	2SD1767
Q	834	Transistor	2SA1576
Q	835	Transistor	DTC124EU
Q	838	Transistor	DTC124EU
Q	839	Transistor	2SA1576
Q	840	Transistor	DTC124EU
Q	841	Transistor	2SB1184F5
Q	842	Transistor	2SD1767
Q	843	Transistor	DTC114EU
Q	844	Transistor	2SA1615-Z
Q	851	Transistor	2SD2375
Q	852	Transistor	IMD2A
Q	854	Transistor	2SA1577
Q	855	Transistor	DTC124EU

=====Circuit Symbol and No.===Part Name			Part No.
Q	903	Transistor	2SA1797
Q	904	Transistor	DTC124EU
D	101	Diode	UDZS5R6(B)
D	102	Diode Network	DA204U
D	103	Diode Network	DA204U
D	104	Diode Network	DA204U
D	105	Diode Network	DA204U
D	106	Diode Network	DA204U
D	107	Diode Network	DA204U
D	108	Diode	1SS355
D	109	Diode	1SS355
D	110	Diode Network	DA204U
D	302	Diode	MA111
D	303	Diode	DAN202U
D	304	Diode	DAN202U
D	305	Diode	DAN202U
D	306	Diode	UDZS8R2(B)
D	307	Diode	DAN202U
D	500	Diode	UDZ12(B)
D	601	Diode	MA111
D	602	Diode	DAN202U
D	701	Diode	DAN202U
D	702	Diode	HZU6R8(B3)
D	703	Diode	S1G-6904G2P
D	704	Diode	S1G-6904G2P
D	705	Diode	S1G-6904G2P
D	706	Diode	UDZS7R5(B)
D	707	Diode	DAN202U
D	708	Diode	S1G-6904G2P
D	709	Diode	S1G-6904G2P
D	801	Diode	UDZS5R6(B)
D	802	Diode	HZU8R2(B1)
D	803	Diode	HZU5R6(B2)
D	805	Diode	UDZS5R6(B)
D	806	Diode	S2G-6600
D	807	Diode	S1G-6904G2P
D	808	Diode	RB063L-30
D	809	Diode	MA111
D	812	Diode	RB063L-30
D	813	Diode	SC802-06
D	814	Diode	RB063L-30
D	815	Diode	S2G-6600
D	816	Diode	RB063L-30
D	817	Diode	UDZS10(B)
D	819	Diode	DAN202U
D	820	Diode	UDZS20(B)
D	851	Diode	HZU10(B1)
D	852	Diode	DAN202U
D	853	Diode	S2G-6600
L	101	Inductor	CTF1399
L	151	Inductor	LCTC2R2K1608
L	201	Coil	CTH1295
L	202	Inductor	CTF1399
L	203	Inductor	CTF1305
L	204	Inductor	CTF1305
L	205	Inductor	CTF1399
L	206	Inductor	CTF1399
L	207	Inductor	CTF1379
L	301	Inductor	CTF1399
L	304	Inductor	LCTA2R2J2520
L	307	Inductor	CTF1379
L	308	Inductor	CTF1379
L	312	Inductor	LCTA101J2520
L	501	Inductor	CTF1399
L	502	Inductor	CTF1399

=====Circuit Symbol and No.===Part Name			Part No.
L	503	Inductor	CTF1399
L	505	Inductor	CTF1399
L	506	Inductor	LCTA100J2520
L	507	Inductor	CTF1383
L	508	Inductor	CTF1383
L	509	Inductor	LCTA150J2520
L	601	Inductor	LCTA2R2J2520
L	602	Inductor	CTF1306
L	603	Inductor	CTF1306
L	604	Inductor	CTF1306
L	701	Inductor	LCTC2R2K1608
L	702	Inductor	LCTC2R2K1608
L	801	Coil	CTH1295
L	803	Coil	CTH1295
L	804	Inductor	CTF1379
L	805	Coil	CTH1295
L	806	Coil	CTH1295
L	807	Coil	CTH1267
L	812	Coil	CTH1295
L	813	Choke Coil 270µH	CTH1263
L	901	Inductor	CTF1395
L	902	Inductor	CTF1379
L	971	Inductor	CTF1379
X	601	Resonator 18.874MHz	CSS1622
VR	501	Semi-fixed 3.3kΩ(B)	CCP1393
VR	801	Semi-fixed 10kΩ(B)	CCP1396
FU	151	Fuse 1A	CEK1280
FU	158	Fuse 5A	CEK1289
FU	201	Fuse 1A	CEK1280
FU	202	Fuse 1A	CEK1280
FU	203	Fuse 1A	CEK1280
FU	204	Fuse 1A	CEK1280
FU	205	Fuse 1A	CEK1280
FU	206	Fuse 1A	CEK1280
FU	207	Fuse 1A	CEK1280
FU	301	Fuse 5A	CEK1289
FU	302	Fuse 4A	CEK1288
FU	701	Fuse 5A	CEK1289
FU	801	Fuse 250mA	CEK1276
FU	802	Fuse 3A	CEK1286
FU	803	Fuse 1.25A	CEK1281
FU	804	Fuse 1.75A	CEK1283
FU	805	Fuse 1.75A	CEK1283
FU	806	Fuse 3A	CEK1286
FU	807	Fuse 2.3A	ICPS2R3
FU	808	Fuse 1A	CEK1280
FU	901	Fuse 1A	CEK1280
EF	801	EMI Filter	CCG1142
BZ	101	Buzzer	CPV1063
TP	1	Test Pin	CKF1031
TP	2	Test Pin	CKF1031

RESISTORS

R	101		RS1/16S332J
R	102		RS1/16S332J
R	103		RS1/16S223J
R	104		RAB4C222J
R	105		RS1/16S102J
R	106		RS1/16S102J
R	107		RS1/16S222J
R	109		RS1/16S104J
R	110		RS1/16S103J
R	111		RS1/16S102J

=====Circuit Symbol and No.===Part Name			Part No.
R	112		RS1/16S102J
R	113		RS1/16S223J
R	114		RS1/16S473J
R	115		RS1/16S472J
R	116		RS1/16S472J
R	117		RS1/16S223J
R	118		RS1/16S472J
R	124		RS1/16S103J
R	125		RS1/16S223J
R	126		RS1/16S472J
R	127		RS1/16S223J
R	128		RS1/16S472J
R	129		RS1/16S473J
R	130		RS1/16S332J
R	131		RS1/16S332J
R	136		RS1/16S0R0J
R	138		RS1/16S102J
R	139		RS1/16S472J
R	140		RS1/16S472J
R	141		RS1/16S822J
R	142		RS1/16S102J
R	144		RS1/16S223J
R	148		RS1/16S223J
R	149		RS1/16S223J
R	150		RS1/16S103J
R	151		RS1/16S223J
R	152		RS1/16S181J
R	153		RS1/16S181J
R	154		RS1/16S223J
R	155		RS1/16S681J
R	156		RS1/16S681J
R	157		RS1/16S150J
R	158		RS1/16S470J
R	159		RS1/16S222J
R	160		RS1/16S101J
R	166		RS1/16S101J
R	173		RS1/16S102J
R	174		RS1/16S102J
R	175		RS1/16S123J
R	176		RS1/16S223J
R	177		RS1/16S123J
R	178		RS1/16S123J
R	179		RS1/16S223J
R	180		RS1/16S123J
R	187		RS1/16S332J
R	188		RS1/16S562J
R	189		RS1/16S102J
R	190		RS1/16S473J
R	193		RS1/16S103J
R	195		RS1/16S102J
R	196		RS1/16S473J
R	198		RS1/16S102J
R	199		RS1/16S102J
R	201		RAB4C102J
R	202		RAB4C102J
R	203		RS1/16S473J
R	204		RS1/16S0R0J
R	207		RS1/16S750J
R	209		RS1/16S0R0J
R	212		RS1/16S332J
R	213		RS1/16S332J
R	214		RS1/16S512J
R	216		RS1/16S0R0J
R	217		RS1/16S101J
R	219		RS1/16S681J
R	220		RS1/16S0R0J
R	302		RS1/16S222J
R	304		RS1/16S392J
R	305		RS1/16S472J
R	314		RS1/16S102J
R	315		RS1/16S222J
R	316		RS1/16S472J
R	317		RS1/16S473J
R	318		RS1/16S473J
R	321		RS1/16S472J
R	328		RS1/16S223J
R	329		RS1/16S223J
R	330		RS1/16S181J
R	331		RS1/16S181J
R	332		RS1/16S102J
R	333		RS1/16S102J
R	336		RS1/16S102J
R	337		RS1/16S391J
R	338		RS1/16S391J
R	339		RS1/16S821J
R	340		RS1/16S821J
R	347		RS1/16S223J
R	348		RS1/16S223J
R	356		RS1/16S0R0J
R	357		RS1/16S0R0J
R	358		RS1/16S0R0J
R	359		RS1/16S0R0J
R	360		RS1/16S0R0J
R	361		RS1/16S0R0J
R	362		RS1/16S0R0J
R	363		RS1/16S0R0J
R	364		RS1/16S223J
R	365		RS1/16S103J
R	366		RS1/16S471J
R	367		RS1/16S471J
R	368		RS1/16S223J
R	369		RS1/16S103J
R	370		RS1/16S223J
R	371		RS1/16S103J
R	372		RS1/16S221J
R	373		RS1/16S103J
R	374		RS1/16S820J
R	375		RS1/16S820J
R	376		RS1/16S101J
R	377		RS1/16S473J
R	378		RS1/16S103J
R	379		RS1/16S820J
R	380		RS1/16S223J
R	381		RS1/16S820J
R	382		RS1/16S820J
R	383		RS1/16S223J
R	384		RS1/16S471J
R	385		RS1/16S223J
R	386		RS1/16S223J
R	387		RS1/16S471J
R	388		RS1/16S471J
R	389		RS1/16S471J
R	390		RS1/16S820J
R	391		RS1/16S223J
R	392		RS1/16S223J
R	393		RS1/16S471J
R	394		RS1/16S471J
R	395		RS1/16S0R0J
R	396		RS1/16S0R0J
R	397		RS1/16S0R0J

=====Circuit Symbol	and No.	===Part Name	Part No.
R	503		RS1/16S472J
R	504		RS1/16S750J
R	506		RS1/16S472J
R	507		RS1/16S472J
R	508		RS1/16S750J
R	512		RS1/16S750J
R	514		RS1/16S472J
R	515		RS1/16S472J
R	516		RS1/16S0R0J
R	517		RS1/16S472J
R	518		RS1/16S102J
R	519		RS1/16S101J
R	520		RS1/16S472J
R	521		RS1/16S472J
R	522		RS1/16S102J
R	529		RS1/16S472J
R	530		RS1/16S472J
R	531		RS1/16S392J
R	532		RS1/16S472J
R	533		RS1/16S392J
R	534		RS1/16S472J
R	535		RS1/16S472J
R	536		RS1/16S472J
R	539		RS1/16S101J
R	540		RS1/16S472J
R	541		RS1/16S472J
R	542		RS1/16S102J
R	543		RS1/16S392J
R	544		RS1/16S472J
R	545		RS1/16S472J
R	546		RS1/16S472J
R	547		RS1/16S101J
R	548		RS1/16S102J
R	550		RS1/16S0R0J
R	551		RS1/16S392J
R	552		RS1/16S472J
R	553		RS1/16S0R0J
R	556		RS1/16S562J
R	557		RS1/16S562J
R	558		RS1/16S0R0J
R	559		RS1/16S0R0J
R	561		RS1/16S0R0J
R	562		RS1/16S270J
R	564		RS1/16S102J
R	565		RS1/16S393J
R	566		RS1/16S152J
R	567		RS1/16S393J
R	568		RS1/16S473J
R	569		RS1/16S473J
R	601		RS1/16S104J
R	602		RS1/16S102J
R	603		RS1/16S473J
R	604		RS1/16S0R0J
R	605		RS1/16S0R0J
R	606		RS1/16S473J
R	607		RS1/16S473J
R	608		RS1/16S473J
R	609		RS1/16S473J
R	610		RS1/16S473J
R	611		RS1/16S473J
R	612		RS1/16S473J
R	613	(RC model)	RS1/16S473J
R	614		RS1/16S473J
R	615		RAB4C102J
R	616		RAB4C102J
R	617		RAB4C102J
R	621		RAB4C102J
R	622		RS1/16S473J
R	623		RS1/16S473J
R	624		RS1/16S473J
R	625		RS1/16S473J
R	626		RS1/16S102J
R	627		RS1/16S221J
R	633		RS1/16S472J
R	634		RS1/16S473J
R	635		RS1/16S473J
R	636		RS1/16S473J
R	637		RS1/16S473J
R	638		RS1/16S473J
R	639		RS1/16S473J
R	640		RS1/16S681J
R	641		RS1/16S473J
R	642		RS1/16S681J
R	643		RS1/16S473J
R	644		RS1/16S102J
R	645		RS1/16S102J
R	646		RS1/16S102J
R	647		RS1/16S102J
R	648		RS1/16S473J
R	649		RS1/16S473J
R	650		RS1/16S473J
R	651		RS1/16S103J
R	652		RS1/16S473J
R	653		RAB4C102J
R	654		RS1/16S473J
R	655		RAB4C681J
R	656		RS1/16S102J
R	657		RS1/16S102J
R	658		RS1/16S681J
R	659		RS1/16S681J
R	660		RS1/16S472J
R	661		RS1/16S472J
R	662		RS1/16S473J
R	663		RS1/16S0R0J
R	664		RS1/16S473J
R	666		RS1/16S473J
R	668		RS1/16S473J
R	669		RS1/16S473J
R	670		RS1/16S101J
R	671		RS1/16S102J
R	672		RS1/16S473J
R	701		RS1/16S102J
R	702		RS1/16S473J
R	703		RS1/16S0R0J
R	704		RS1/16S473J
R	705		RS1/16S473J
R	706		RS1/16S103J
R	707		RS1/16S103J
R	708		RS1/16S473J
R	709		RS1/16S103J
R	710		RS1/16S104J
R	711		RS1/16S102J
R	712		RS1/16S472J
R	713		RS1/16S472J
R	714		RS1/16S473J
R	715		RS1/16S472J
R	716		RS1/16S153J
R	801		RS1/16S561J
R	802		RS1/16S332J
R	803		RS1/16S181J

=====Circuit Symbol and No.===Part Name			Part No.
R	805		RS1/16S102J
R	806		RS1/16S471J
R	807		RS1/16S471J
R	809		RS1/16S332J
R	812		RS1/16S391J
R	813		RS1/16S391J
R	821		RS1/16S391J
R	822		RS1/16S472J
R	823		RS1/16S222J
R	824		RS1/16S1203D
R	825		RS1/16S1502D
R	826		RS1/16S6802D
R	827		RS1/16S2201D
R	828		RS1/16S470J
R	829		RS1/16S470J
R	830		RS1/16S101J
R	831		RS1/16S101J
R	832		RS1/16S472J
R	833		RS1/16S560J
R	834		RS1/16S102J
R	835		RS1/16S473J
R	836		RS1/16S6200D
R	837		RS1/16S3602D
R	838		RS1/16S3901D
R	839		RS1/16S100J
R	840		RS1/16S0R0J
R	847		RS1/16S2203D
R	848		RS1/16S102J
R	850		RS1/16S103J
R	851		RS1/16S221J
R	852		RS1/16S272J
R	853		RS1/16S0R0J
R	855		RS1/16S6801D
R	856		RS1/16S1502D
R	857		RS1/16S272J
R	858		RS1/16S473J
R	860		RS1/16S6801D
R	861		RS1/16S102J
R	864		RS1/16S5602D
R	865		RS1/16S1002D
R	868		RS1/16S102J
R	870		RS1/16S102J
R	871		RS1/16S1503D
R	872		RS1/16S0R0J
R	873		RS1/16S8202D
R	874		RS1/16S3301D
R	875		RS1/16S473J
R	876		RS1/16S0R0J
R	877		RS1/16S472J
R	878		RS1/16S103J
R	879		RS1/16S472J
R	880		RS1/16S103J
R	882		RS1/16S151J
R	883		RS1/16S103J
R	884		RS1/16S103J
R	885		RS1/16S820J
R	886		RS1/16S471J
R	887		RS1/16S820J
R	888		RS1/10S301J
R	889		RS1/10S301J
R	890		RS1/16S153J
R	891		RS1/16S121J
R	892		RS1/16S151J
R	893		RS1/16S0R0J
R	894		RS1/16S222J

=====Circuit Symbol and No.===Part Name			Part No.
R	895		RS1/16S472J
R	896		RS1/16S392J
R	897		RS1/10S0R0J
R	898		RS1/10S0R0J
R	900		RS1/16S121J
R	913		RS1/16S332J
R	914		RS1/16S221J
R	915		RS1/16S221J
R	916		RS1/16S271J
R	917		RS1/16S271J
R	971		RS1/16S221J
R	972		RS1/16S621J
R	973		RS1/16S473J
R	974		RS1/16S361J
R	975		RS1/16S0R0J

CAPACITORS

C	101		CKSRYB103K50
C	102		CKSRYB104K16
C	103		CKSRYB104K16
C	104		CKSRYB103K50
C	105		CKSRYB104K16
C	106		CKSRYB104K16
C	151		CKSRYB104K16
C	153		CKSRYB104K16
C	154		CKSRYB104K16
C	155		CKSRYB104K16
C	156		CKSRYB104K16
C	157		CKSRYB105K6R3
C	158		CKSRYB105K6R3
C	159		CKSRYB105K6R3
C	160		CKSRYB105K6R3
C	165		CKSYB475K10
C	167	10μF/16V	CCH1442
C	168	10μF/16V	CCH1442
C	169		CKSRYB104K16
C	170	10μF/16V	CCH1442
C	171	10μF/16V	CCH1442
C	173		CKSRYB104K16
C	201		CEV221M4
C	202		CEV221M4
C	203		CKSYB106K6R3
C	205		CKSRYB102K50
C	206		CKSRYB102K50
C	207		CKSYB475K10
C	209		CEV220M6R3
C	210		CEV101M16
C	220		CKSRYB103K50
C	221		CKSRYB103K50
C	301	10μF/16V	CCH1442
C	302		CKSYB106K6R3
C	306	10μF/16V	CCH1442
C	307		CCSRCH220J50
C	308		CKSYB475K10
C	309		CKSRYB102K50
C	310		CCSRCH220J50
C	311	4.7μF/35V	CCH1483
C	312	4.7μF/35V	CCH1483
C	320		CKSRYB224K10
C	321		CKSRYB105K6R3
C	322		CKSRYB105K6R3
C	323		CKSRYB102K50
C	324		CKSRYB105K6R3
C	325		CKSRYB105K6R3
C	326	47μF/16V	CCH1413
C	327		CKSRYB224K10
C	328		CKSRYB104K16

=====Circuit Symbol and No.===Part Name			Part No.
C	329		CKSRYB105K6R3
C	330		CKSRYB105K6R3
C	331		CKSRYB105K6R3
C	332		CKSRYB105K6R3
C	333	47μF/16V	CCH1413
C	334		CKSYB475K10
C	335		CKSYB475K10
C	336		CKSYB475K10
C	337		CKSYB475K10
C	338		CKSYB475K10
C	339		CKSYB475K10
C	340		CKSYB475K10
C	341		CKSYB475K10
C	345		CCSRCH100D50
C	346		CCSRCH100D50
C	347	10μF/16V	CCH1442
C	348		CKSRYB104K16
C	349		CKSRYB104K16
C	350		CCSRCH100D50
C	351		CCSRCH100D50
C	352		CCSRCH100D50
C	353		CCSRCH100D50
C	354	10μF/16V	CCH1442
C	355		CKSYB475K10
C	356		CEVL101M10
C	357	4.7μF/35V	CCH1483
C	358		CKSQYB225K10
C	359		CKSQYB225K10
C	360		CKSQYB225K10
C	361		CKSQYB225K10
C	362		CKSQYB225K10
C	363		CKSQYB225K10
C	364		CKSRYB105K10
C	365		CKSRYB105K10
C	366		CKSRYB105K10
C	367		CKSRYB105K10
C	368		CKSRYB105K10
C	369		CKSRYB105K10
C	370		CKSRYB105K10
C	371		CKSRYB105K10
C	372	10μF/16V	CCH1442
C	373		CKSRYB105K10
C	374		CCH1444
C	375		CKSYB684K16
C	376	10μF/16V	CCH1442
C	377	10μF/16V	CCH1442
C	378	10μF/16V	CCH1442
C	379		CCH1444
C	380		CCH1444
C	381		CKSRYB105K6R3
C	382	3300μF/16V	CCH1486
C	383	10μF/16V	CCH1442
C	384	10μF/16V	CCH1442
C	385	10μF/16V	CCH1442
C	386		CKSRYB222K50
C	387		CKSRYB222K50
C	388		CKSRYB222K50
C	389		CKSRYB222K50
C	390		CKSRYB222K50
C	391		CKSRYB222K50
C	392		CKSRYB104K16
C	393	10μF/16V	CCH1442
C	394		CKSYB475K10
C	395		CKSYB475K10
C	396		CKSRYB473K50

=====Circuit Symbol and No.===Part Name			Part No.
C	404	10μF/16V	CCG1138
C	501		CKSYB106K6R3
C	502		CKSYB106K6R3
C	503		CKSYB106K6R3
C	504		CKSYB106K6R3
C	505		CKSYB106K6R3
C	508		CKSYB106K6R3
C	509		CKSYB106K6R3
C	511		CCSRCH6R0D50
C	512		CKSRYB105K6R3
C	514		CCSRCH6R0D50
C	515		CKSRYB105K6R3
C	519		CKSRYB102K50
C	520		CKSYB106K6R3
C	521		CKSRYB104K16
C	522		CKSYB106K6R3
C	523		CKSRYB102K50
C	524		CKSYB106K6R3
C	525		CKSRYB104K16
C	526		CCSRCH6R0D50
C	531		CKSRYB105K6R3
C	533		CCSRCH6R0D50
C	534		CKSRYB105K6R3
C	535		CKSRYB102K50
C	536		CKSRYB104K16
C	537		CKSRYB105K6R3
C	539		CKSRYB105K6R3
C	540		CKSRYB102K50
C	541		CKSYB106K6R3
C	542		CKSRYB104K16
C	545		CKSRYB105K6R3
C	546		CKSRYB105K6R3
C	547		CKSRYB105K6R3
C	548	10μF/16V	CCH1442
C	549		CKSRYB104K16
C	550		CKSRYB105K6R3
C	551		CEV221M4
C	552		CEV221M4
C	553		CEV221M4
C	554		CEV221M4
C	555		CEV101M16
C	556		CKSYB106K6R3
C	557		CKSYB106K6R3
C	558	10μF/16V	CCH1442
C	559		CKSYB106K6R3
C	560		CKSRYB223K50
C	601		CKSRYB105K6R3
C	602		CEV2R2M50
C	603		CCSRCH101J50
C	604		CKSRYB105K6R3
C	605		CKSRYB105K6R3
C	606		CCSRCH7R0D50
C	607		CCSRCH7R0D50
C	608		CCSRCH100D50
C	609		CCSRCH100D50
C	672		CKSRYB104K16
C	701		CKSRYB103K50
C	702		CKSRYB104K16
C	703		CKSRYB105K10
C	704		CKSRYB104K16
C	705		CKSQYB104K25
C	706		CKSRYB104K16
C	707		CKSRYB104K16
C	801		CKSRYB104K16
C	802	47μF/16V	CCH1413

=====Circuit Symbol and No.		===Part Name	Part No.
C	803		CKSRYB103K50
C	806	47μF/16V	CCH1413
C	810		CKSRYB104K16
C	811	47μF/16V	CCH1413
C	812		CKSRYB103K50
C	813		CKSRYB474K10
C	814	470μF/6.3V	CCH1437
C	815	0.22μF/3.5V	CCL1058
C	816		CKSRYB102K50
C	817		CKSRYB105K6R3
C	818	220μF/10V	CCH1409
C	819		CKSRYB102K50
C	820		CKSYB475K10
C	824		CEHAZL471M16
C	826		CKSYB225K16
C	827		CKSYB225K16
C	828		CEV1R0M50
C	829		CKSRYB102K50
C	830		CKSYB475K10
C	831		CKSRYB103K50
C	832		CCSRCH121J50
C	835		CKSYB475K16
C	836	2200μF/16V	CCH1405
C	838	470μF/6.3V	CCH1437
C	839	47μF/16V	CCH1413
C	840		CKSRYB474K10
C	841		CKSRYB104K16
C	842		CKSRYB104K16
C	843		CKSYB475K16
C	844		CEHAZL471M16
C	846	10μF/16V	CCH1442
C	847		CKSRYB103K50
C	848		CKSRYB103K50
C	849		CEV101M16
C	850	0.1μF/5.5V	CCL1059
C	851		CKSRYB103K50
C	852		CKSRYB103K50
C	853		CEV101M16
C	854		CKSRYB104K16
C	855		CKSRYB104K16
C	856	10μF/16V	CCH1442
C	857		CKSRYB102K50
C	858		CEV101M16
C	870		CKSYB225K16
C	874		CKSRYB104K16
C	878	100μF/16V	CCH1228
C	882	1000μF/16V	CCH1428
C	883	100μF/16V	CCH1228
C	971		CCSRCH150J50
C	972		CKSRYB104K16
C	973		CKSYB106K6R3

G

Unit Number : CWM8774(UC,RC,RD model)
Unit Number : CWM8773(EW model)
Unit Name : Tuner Unit

MISCELLANEOUS

IC	1402	IC	BA00ASFP
Q	1401	Transistor	IMH2A
Q	1402	Transistor	IMH2A
Q	1403	Transistor	2SC4081
Q	1404	Transistor	2SD2375
D	1401	Diode(EW model)	UDZ6R8(B)
D	1402	Diode(EW model)	UDZS3R9(B)
ZNR	1401	Surge Protector	RCCA-201Q31UA-PI
L	1401	Inductor	LCTA4R7J2520
L	1404	Inductor	CTF1295

=====Circuit Symbol and No.		===Part Name	Part No.
L	1406	Inductor	LCTA1R0J2520
L	1407	Inductor	LCTA1R0J3225
L	1408	Inductor	LCTA680J4532
FU	1401	Fuse 5A	CEK1289
FU	1402	Fuse 5A	CEK1289

RESISTORS

R	1401	(EW model)	RAB4C223J
R	1402		RAB4C471J
R	1403		RAB4C471J
R	1404		RS1/16S0R0J
R	1405		RS1/16S103J
R	1406		RS1/16S103J
R	1407		RS1/16S103J
R	1412		RS1/16S1001D
R	1413		RS1/16S2201D
R	1414		RS1/16S1202D
R	1415		RS1/16S102J
R	1416		RS1/16S102J
R	1417		RS1/16S101J
R	1418		RS1/16S470J

CAPACITORS

C	1403	100μF/6.3V	CCH1496
C	1404		CKSYB475K10
C	1405		CKSRYB103K50
C	1406	56μF/16V	CCH1497
C	1408		CKSRYB103K50
C	1414		CCSRCH221J50
C	1415		CKSRYB105K6R3
C	1416		CCSRCH221J50
C	1417		CCSRCH221J50
C	1418		CCSRCH221J50
C	1419		CKSRYB104K16
C	1421		CKSRYB474K10
C	1422		CKSRYB474K10
C	1425		CEV220M10
C	1426		CEV101M16
C	1427		CKSRYB104K16
C	1428		CEV101M10
C	1429		CKSYB474K16

Monitor Unit
Consists of Monitor PCB Inverter PCB Upper PCB Sense PCB

H I J K

Unit Number : CWM8764(UC,RC,RD model)
Unit Number : CWM8763(EW model)
Unit Name : Monitor Unit

MISCELLANEOUS

IC	4001	IC	TC90A64AF-P
IC	4061	IC	TC7SZ02FU
IC	4063	IC	TC7SZ32FU
IC	4064	IC	TC7SZ08FU
IC	4065	IC	TC7SZ08FU
IC	4092	IC	TC7SH08FU
IC	4093	IC	TC7SH08FU
IC	4141	IC	TC7SH08FU
IC	4142	IC	TK15404MI
IC	4151	IC	NJM2138V

=====Circuit Symbol and No.		===Part Name	Part No.
IC	4181	IC	NJM082BV
IC	4311	IC	NJM062V
IC	4451	IC	TC7SET08FU
IC	4601	IC	PD5842A
IC	4602	IC	S-80827CNNB-B8M
IC	4604	IC	TC7SET08FU
IC	4605	IC	TC7SH08FU
IC	4691	IC	S-93C46BR0I-J8T1
IC	4701	IC	PD6340A
IC	4841	IC	R1130H251B
IC	4851	IC	LT1376CS8
IC	4861	IC	MAX1748EUE
IC	5001	IC	TA78L05F
IC	5002	IC	TC7SET08FU
IC	5003	IC	OZ961IS
IC	5004	FET	SI6544DQ
IC	5005	FET	SI6544DQ
Q	4002	Transistor	2SC4617
Q	4061	Transistor	2SC4617
Q	4062	Transistor	2SC4617
Q	4063	Transistor	2SC4617
Q	4101	Transistor	2SC4617
Q	4102	Transistor	2SA1774
Q	4103	Transistor	2SC4617
Q	4111	Transistor	2SC4617
Q	4112	Transistor	2SA1774
Q	4113	Transistor	2SC4617
Q	4121	Transistor	2SC4617
Q	4122	Transistor	2SA1774
Q	4123	Transistor	2SC4617
Q	4131	Transistor	2SC4617
Q	4132	Transistor	2SA1774
Q	4133	Transistor	2SC4617
Q	4151	Transistor	UMZ1N
Q	4152	Transistor	UMZ1N
Q	4153	Transistor	UMZ1N
Q	4154	Transistor	UMZ1N
Q	4155	Transistor	UMZ1N
Q	4156	Transistor	UMZ1N
Q	4182	Transistor	UMX2N
Q	4183	Transistor	UMT2N
Q	4421	Transistor	IMD3A
Q	4422	Transistor	IMD2A
Q	4423	Transistor	FMG12
Q	4601	Transistor	2SD1664
Q	4602	Transistor	2SC4617
Q	4603	Transistor	DTC114EE
Q	4741	Transistor	DTA123JK
Q	4742	Transistor	DTC124EK
Q	4831	Transistor	2SB1260
Q	4832	Transistor	DTC114EK
Q	4835	Transistor	2SD1664
Q	5001	Transistor	2SC4617
Q	5002	Transistor	2SC4617
Q	5003	Transistor	2SA1774
D	4311	Photo Diode	AM-30-21
D	4321	LED	NSSW440-9159
D	4322	LED	NSSW440-9159
D	4331	LED(EW model)	CL-195SR-CD
D	4332	LED(EW model)	CL-195SR-CD
D	4333	LED(EW model)	CL-195SR-CD
D	4334	LED(EW model)	CL-195SR-CD
D	4335	LED(EW model)	CL-195SR-CD
D	4336	LED(EW model)	CL-195SR-CD
D	4337	LED(EW model)	CL-195SR-CD

=====Circuit Symbol and No.		===Part Name	Part No.
D	4338	LED(EW model)	CL-195SR-CD
D	4351	LED	CL-195PG-CD
D	4352	LED	CL-195PG-CD
D	4353	LED	CL-195PG-CD
D	4354	LED	CL-195PG-CD
D	4355	LED	CL-195PG-CD
D	4356	LED	CL-195PG-CD
D	4357	LED	CL-195PG-CD
D	4358	LED	CL-195PG-CD
D	4421	Diode	MA111
D	4422	Diode	MA111
D	4423	Diode	UDZS5R1(B)
D	4424	Diode	HZU5R6(B2)
D	4425	Diode	HZU5R6(B2)
D	4426	Diode	HZU5R6(B2)
D	4427	Diode	1SS355
D	4601	Diode	UDZS5R1(B)
D	4602	Diode	UDZS3R9(B)
D	4603	Diode	1SS355
D	4701	Diode	HZU5R6(B2)
D	4702	Diode	HZU5R6(B2)
D	4703	Diode	HZU5R6(B2)
D	4704	Diode	HZU5R6(B2)
D	4705	Diode	HZU5R6(B2)
D	4706	Diode	HZU5R6(B2)
D	4835	Diode	HZU5R6(B2)
D	4851	Diode	RB500V-40
D	4852	Diode	U2FWJ44N
D	4861	Diode	RB160M-30
D	4862	Diode	RB500V-40
D	4863	Diode	RB500V-40
D	4864	Diode	RB500V-40
D	4865	Diode	RB500V-40
D	4866	Diode	RB500V-40
D	4867	Diode	RB500V-40
D	4868	Diode	RB500V-40
D	4869	Diode	RB500V-40
D	5001	Diode	HZU6R2(B3)
D	5002	Diode	1SS355
D	5003	LED	CL-195PG-CD
D	5004	LED(EW model)	CL-195SR-CD
D	5005	LED	CL-195PG-CD
D	5006	LED(EW model)	CL-195SR-CD
D	5007	LED	CL-195PG-CD
D	5008	LED(EW model)	CL-195SR-CD
D	5009	Diode	RB751V40
D	5010	Diode	HZU6R2(B3)
D	5011	Diode	HZU6R2(B3)
D	5012	Diode	HZU6R2(B3)
D	5013	Diode	MA143
D	5014	Diode	MA143
L	4001	Inductor	CTF1306
L	4002	Inductor	CTF1306
L	4003	Inductor	CTF1306
L	4004	Inductor	CTF1306
L	4005	Inductor	CTF1306
L	4006	Inductor-Array	CTF1421
L	4007	Ferrite Beed	CTF1528
L	4008	Inductor	CTF1306
L	4011	Inductor	CTF1306
L	4012	Ferrite Beed	CTF1528
L	4013	Ferrite Beed	CTF1528
L	4014	Ferrite Beed	CTF1528
L	4015	Inductor	CTF1306
L	4016	Ferrite Beed	CTF1528

=====Circuit Symbol and No.===Part Name			Part No.
L	4061	Inductor	LCKA101J2520
L	4071	Inductor	LCKB100K2520
L	4074	Inductor	LCKB100K2520
L	4075	Inductor	LCKB100K2520
L	4078	Inductor	LCKB100K2520
L	4079	Inductor	CTF1306
L	4091	Inductor	CTF1306
L	4092	Inductor	CTF1306
L	4094	Inductor	CTF1306
L	4101	Inductor	LCKB100K2520
L	4141	Inductor	LCKB100K2520
L	4151	Inductor	LCKB100K2520
L	4152	Inductor	LCKB100K2520
L	4181	Inductor	LCKA101J2520
L	4182	Inductor	LCKA101J2520
L	4311	Inductor	LCKB100K2520
L	4451	Inductor	CTF1306
L	4601	Inductor	LCKB100K2520
L	4602	Inductor	LCKB100K2520
L	4603	Inductor	LCKA101J2520
L	4701	Inductor	LCKB100K2520
L	4801	Inductor	LCKB100K2520
L	4802	Inductor	LCKB100K2520
L	4803	Inductor	LCKB100K2520
L	4804	Inductor	LCKB100K2520
L	4841	Choke Coil 10µH	CTH1249
L	4851	Choke Coil 10µH	CTH1259
L	4852	Choke Coil 18µH	CTH1250
L	4861	Choke Coil 10µH	CTH1249
L	4862	Choke Coil 6.8µH	CTH1248
L	4863	Inductor	LCKB100K2520
L	4864	Inductor	LCKB100K2520
L	4865	Inductor	LCKB100K2520
T	5001	Transformer	CTT1103
X	4001	Crystal Resonator 42MHz	CSS1541
X	4601	Radiator 10.0MHz	CSS1577
X	4701	Ceramic Resonator 4.97MHz	CSS1573
S	4351	Push Switch	CSG1111
S	4352	Push Switch	CSG1111
S	4353	Push Switch	CSG1111
S	4354	Push Switch	CSG1111
S	5001	Push Switch	CSG1111
S	5002	Push Switch	CSG1111
S	5003	Push Switch	CSG1111
VR	5001	Semi-fixed 15kΩ(B)	CCP1397
FU	4831	Fuse 630mA	CEK1252

RESISTORS

R	3		RS1/16S0R0J
R	4		RS1/16S0R0J
R	5		RS1/16S0R0J
R	6		RS1/16S0R0J
R	7		RS1/16S0R0J
R	8		RS1/16S0R0J
R	9		RS1/16S0R0J
R	4001		RS1/16S101J
R	4002		RS1/16S470J
R	4003		RS1/16S101J
R	4004		RS1/16S101J
R	4005		RS1/16S473J
R	4006		RS1/16S392J
R	4009		RS1/16S152J
R	4010		RS1/16S331J

=====Circuit Symbol and No.===Part Name			Part No.
R	4012		RS1/16SS105J
R	4013		RS1/16S391J
R	4015		RS1/16S473J
R	4018		RS1/16S101J
R	4023		RS1/16S102J
R	4024		RS1/16S333J
R	4025		RS1/16S101J
R	4026		RS1/16S101J
R	4027		RS1/16S101J
R	4028		RS1/16SS0R0J
R	4030		RS1/16S101J
R	4061		RS1/16S473J
R	4062		RS1/16S473J
R	4065		RS1/16S1002D
R	4066		RS1/16S1002D
R	4067		RS1/16S1002D
R	4068		RS1/16S5602F
R	4069		RS1/16S5602F
R	4070		RS1/16S5602F
R	4071		RS1/16S5602F
R	4072		RS1/16S5602F
R	4073		RS1/16S5602F
R	4074		RS1/16S102J
R	4075		RS1/16S102J
R	4076		RS1/16S102J
R	4077		RS1/16S101J
R	4078		RS1/16S101J
R	4079		RS1/16S101J
R	4080		RS1/16S101J
R	4083		RS1/16SS470J
R	4084		RS1/16S470J
R	4085		RS1/16SS471J
R	4086		RS1/16SS101J
R	4091		RS1/16S101J
R	4093		RS1/16S471J
R	4094		RS1/16S471J
R	4095		RS1/16S471J
R	4101		RS1/16S1502F
R	4102		RS1/16S1003F
R	4103		RS1/16S681J
R	4104		RS1/16S331J
R	4107		RS1/16S1302F
R	4108		RS1/16S331J
R	4109		RS1/16S391J
R	4110		RS1/16S391J
R	4111		RS1/16S153J
R	4112		RS1/16S104J
R	4113		RS1/16S681J
R	4114		RS1/16S331J
R	4118		RS1/16S331J
R	4119		RS1/16S391J
R	4120		RS1/16S391J
R	4121		RS1/16S153J
R	4122		RS1/16S104J
R	4123		RS1/16S681J
R	4124		RS1/16S331J
R	4128		RS1/16S331J
R	4129		RS1/16S391J
R	4130		RS1/16S391J
R	4131		RS1/16S153J
R	4132		RS1/16S104J
R	4133		RS1/16S681J
R	4134		RS1/16S331J
R	4138		RS1/16S331J
R	4139		RS1/16S391J

=====Circuit Symbol and No.===Part Name			Part No.
R	4140		RS1/16S391J
R	4141		RS1/16S105J
R	4142		RS1/16S224J
R	4145		RS1/16S1501F
R	4146		RS1/16S5602F
R	4147		RS1/16S3302F
R	4148		RS1/16S1002F
R	4150		RS1/16S183J
R	4152		RS1/16S3901F
R	4153		RS1/16S1501F
R	4154		RS1/16S102J
R	4155		RS1/16S102J
R	4156		RS1/16S1501F
R	4157		RS1/16S3901F
R	4160		RS1/16S1002F
R	4161		RS1/16S1802F
R	4162		RS1/16S102J
R	4163		RS1/16S3901F
R	4164		RS1/16S1501F
R	4165		RS1/16S102J
R	4166		RS1/16S272J
R	4167		RS1/16S102J
R	4168		RS1/16S272J
R	4169		RS1/16S102J
R	4170		RS1/16S272J
R	4171		RS1/16S331J
R	4172		RS1/16S103J
R	4174		RS1/16S331J
R	4175		RS1/16S103J
R	4177		RS1/16S331J
R	4178		RS1/16S103J
R	4180		RS1/16S243J
R	4181		RS1/16S3002F
R	4182		RS1/16S223J
R	4183		RS1/16S1203F
R	4184		RS1/16S1602F
R	4185		RS1/16S1502F
R	4186		RS1/16S1002F
R	4187		RS1/16S1002F
R	4188		RS1/16SS101J
R	4189		RS1/16S153J
R	4190		RS1/16S100J
R	4191		RS1/16S153J
R	4192		RS1/16SS100J
R	4193		RS1/16S0R0J
R	4194		RS1/16S0R0J
R	4208		RS1/16SS101J
R	4209		RS1/16SS101J
R	4311		RS1/16S185J
R	4312		RS1/16S105J
R	4313		RS1/16SS393J
R	4314		RS1/16SS103J
R	4315		RS1/16SS203J
R	4316		RS1/16SS393J
R	4321		RS1/16SS121J
R	4322		RS1/16SS181J
R	4323		RS1/16SS121J
R	4324		RS1/16SS181J
R	4331	(EW model)	RS1/16SS151J
R	4332	(EW model)	RS1/16SS151J
R	4333	(EW model)	RS1/16SS181J
R	4334	(EW model)	RS1/16SS181J
R	4335	(EW model)	RS1/16SS151J
R	4336	(EW model)	RS1/16SS151J
R	4337	(EW model)	RS1/16SS181J
R	4338	(EW model)	RS1/16SS181J
R	4339	(EW model)	RS1/16SS151J
R	4340	(EW model)	RS1/16SS151J
R	4341	(EW model)	RS1/16SS181J
R	4342	(EW model)	RS1/16SS181J
R	4343	(EW model)	RS1/16SS151J
R	4344	(EW model)	RS1/16SS151J
R	4345	(EW model)	RS1/16SS181J
R	4346	(EW model)	RS1/16SS181J
R	4351		RS1/16SS151J
R	4352		RS1/16SS151J
R	4353		RS1/16SS121J
R	4354		RS1/16SS121J
R	4355		RS1/16SS151J
R	4356		RS1/16SS151J
R	4357		RS1/16SS121J
R	4358		RS1/16SS121J
R	4359		RS1/16SS151J
R	4360		RS1/16SS151J
R	4361		RS1/16SS181J
R	4362		RS1/16SS181J
R	4363		RS1/16SS151J
R	4364		RS1/16SS151J
R	4365		RS1/16SS181J
R	4366		RS1/16SS181J
R	4421		RS1/16S104J
R	4422		RS1/16SS104J
R	4423		RS1/16SS471J
R	4424		RS1/16SS471J
R	4451		RS1/16S101J
R	4452		RS1/16SS101J
R	4453		RS1/16SS101J
R	4454		RS1/16SS101J
R	4455		RS1/16S101J
R	4456		RS1/16SS103J
R	4461		RS1/16SS101J
R	4462		RS1/16SS101J
R	4463		RS1/16S101J
R	4464		RS1/16SS101J
R	4465		RS1/16SS101J
R	4466		RS1/16SS101J
R	4494		RS1/16SS0R0J
R	4507		RS1/16SS0R0J
R	4601		RS1/16S180J
R	4602		RS1/16SS473J
R	4603		RS1/16SS102J
R	4604		RS1/16SS473J
R	4605		RS1/16SS223J
R	4606		RS1/16SS473J
R	4607		RS1/16SS101J
R	4608		RS1/16SS103J
R	4609		RS1/16SS102J
R	4611		RS1/16SS272J
R	4612		RS1/16SS272J
R	4613		RS1/16SS471J
R	4614		RS1/16SS471J
R	4615		RS1/16SS102J
R	4616		RAB4CQ102J
R	4617		RS1/16SS473J
R	4619		RS1/16SS0R0J
R	4620		RS1/16SS0R0J
R	4621		RS1/16SS473J
R	4622		RS1/16SS471J
R	4623		RS1/16SS103J
R	4624		RS1/16SS103J

=====Circuit Symbol and No.===Part Name			Part No.
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R	4625		RS1/16SS473J
R	4626		RAB4CQ473J
R	4627		RS1/16SS472J
R	4628		RS1/16SS472J
R	4629		RS1/16SS473J
R	4692		RS1/16SS103J
R	4701		RS1/16SS101J
R	4702		RS1/16SS101J
R	4703		RS1/16SS101J
R	4704		RS1/16SS101J
R	4705		RS1/16SS471J
R	4706		RS1/16SS471J
R	4707		RS1/16SS0R0J
R	4709		RS1/16SS472J
R	4710		RS1/16SS472J
R	4741		RS1/16SS0R0J
R	4742		RS1/16SS0R0J
R	4802		RS1/16S0R0J
R	4803		RS1/16S333J
R	4804		RS1/16S0R0J
R	4805		RS1/16S0R0J
R	4806		RS1/16S0R0J
R	4831		RS1/16S153J
R	4832		RS1/16S472J
R	4833		RS1/16S472J
R	4835		RS1/16S121J
R	4851		RS1/16S182J
R	4852		RS1/16S512J
R	4861		RS1/16S104J
R	4862		RS1/16S102J
R	4863		RS1/16S1102F
R	4864		RS1/16S2001F
R	4865		RS1/16S3302F
R	4866		RS1/16S2401F
R	4867		RS1/16S5602F
R	4868		RS1/16S2703F
R	4869		RS1/16S5602F
R	5001	(EW model)	RAB4CQ181J
R	5002		RAB4CQ151J
R	5003		RS1/16S473J
R	5004		RAB4CQ181J
R	5005		RS1/16S104J
R	5006		RS1/16S472J
R	5007		RS1/16S473J
R	5008		RS1/16S473J
R	5009		RS1/16S105J
R	5010		RS1/16S333J
R	5011		RS1/16S513J
R	5014		RS1/16S102J
R	5015		RS1/16S105J
R	5016		RS1/16S563J
R	5017		RS1/16S103J
R	5018		RS1/16S103J
R	5019		RS1/16S561J
R	5022		RS1/16SS181J
R	5023		RS1/16SS221J

CAPACITORS

=====Circuit Symbol and No.===Part Name			Part No.
C	4001		CKSRYB105K6R3
C	4002		CKSSYB104K10
C	4003		CKSSYB104K10
C	4004		CKSSYB104K10
C	4005		CKSSYB104K10
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C	4006		CKSSYB104K10
C	4007		CKSSYB104K10
C	4008		CKSSYB104K10
C	4009		CKSSYB104K10
C	4010		CKSSYB104K10
C	4011		CKSSYB104K10
C	4012		CKSSYB104K10
C	4013		CKSRYB392K50
C	4015		CKSRYB105K6R3
C	4016		CKSSYB104K10
C	4017		CKSSYB104K10
C	4018		CKSRYB104K16
C	4019		CKSRYB104K16
C	4020		CKSRYB104K16
C	4021		CKSSYB104K10
C	4022		CKSRYB104K16
C	4023		CKSRYB104K16
C	4024		CKSRYB104K16
C	4025		CKSSYB104K10
C	4026		CKSSYB104K10
C	4027		CKSSYB104K10
C	4028		CKSSYB104K10
C	4029		CKSSYB104K10
C	4030		CKSRYB104K16
C	4031		CKSSYB104K10
C	4032		CKSSYB104K10
C	4033		CKSSYB104K10
C	4034		CKSSYB104K10
C	4035		CKSRYB103K50
C	4036		CCSRCH4R0C50
C	4037		CKSSYB104K10
C	4040		CKSSYB104K10
C	4042		CCSRCH181J50
C	4045		CCSRCH8R0D50
C	4046		CCSRCH8R0D50
C	4047		CKSSYB104K10
C	4048		CKSSYB104K10
C	4049		CKSSYB104K10
C	4050		CKSRYB105K6R3
C	4051		CKSSYB104K10
C	4052		CKSSYB104K10
C	4054		CCSRCH101J50
C	4055		CKSRYB104K16
C	4061		CKSRYB104K16
C	4062		CKSRYB104K16
C	4063		CKSRYB104K16
C	4064		CSZS100M10
C	4068		CKSQYB225K10
C	4069		CKSQYB225K10
C	4070		CKSQYB225K10
C	4071		CSZS100M10
C	4074		CKSRYB105K6R3
C	4075		CKSRYB105K6R3
C	4094		CKSRYB104K16
C	4096		CCSRCH471J50
C	4101		CKSYB106K6R3
C	4102		CCSRCH470J50
C	4103		CCSRCH470J50
C	4104		CKSRYB104K16
C	4105		CSZS100M10
C	4111		CKSYB106K6R3
C	4112		CCSRCH470J50
C	4113		CCSRCH470J50
C	4114		CKSRYB104K16
C	4121		CKSYB106K6R3

=====Circuit Symbol and No.	===	Part Name	Part No.
C	4122		CCSRCH470J50
C	4123		CCSRCH470J50
C	4124		CKSRYB104K16
C	4131		CKSYB106K6R3
C	4132		CCSRCH470J50
C	4133		CCSRCH470J50
C	4134		CKSRYB104K16
C	4140		CKSQYB225K10
C	4141		CKSRYB105K6R3
C	4142		CKSRYB104K16
C	4143		CSZS100M10
C	4144		CKSRYB104K16
C	4145		CKSRYB104K16
C	4151		CSZSR220M16
C	4152		CKSRYB103K50
C	4153		CCSRCH4R0C50
C	4154		CCSRCH4R0C50
C	4155		CCSRCH4R0C50
C	4156		CKSRYB104K16
C	4160		CKSRYB104K16
C	4161		CKSRYB104K16
C	4162		CKSRYB104K16
C	4163		CKSQYB225K10
C	4164		CKSQYB225K10
C	4165		CKSQYB225K10
C	4166		CKSRYB104K16
C	4167		CKSRYB104K16
C	4168		CKSRYB104K16
C	4169		CKSRYB103K50
C	4170		CSZSR220M16
C	4171		CSZSR220M16
C	4181		CSZSR220M16
C	4182		CKSRYB104K16
C	4183		CSZSR4R7M16
C	4184		CKSRYB104K16
C	4186		CKSRYB104K16
C	4188		CKSRYB104K16
C	4311		CKSRYB474K10
C	4312		CKSRYB104K16
C	4313		CKSRYB104K16
C	4314		CKSRYB104K16
C	4315		CKSRYB104K16
C	4321		CKSRYB104K16
C	4322		CKSRYB104K16
C	4421		CKSSYB102K50
C	4422		CKSSYB102K50
C	4423		CKSSYB102K50
C	4424		CKSRYB102K50
C	4425		CKSRYB105K6R3
C	4426		CKSSYB102K50
C	4427		CKSSYB102K50
C	4451	10µF	CCG1138
C	4452	10µF	CCG1138
C	4454		CKSRYB104K16
C	4601		CSZSR330M10
C	4602		CKSRYB104K16
C	4604		CSZS330M6R3
C	4608		CKSRYB104K16
C	4609		CKSRYB104K16
C	4610		CKSSYB104K10
C	4611		CKSRYB104K16
C	4612		CKSSYB104K10
C	4691		CKSRYB104K16
C	4701		CSZSR330M10
C	4702		CKSRYB104K16
C	4801		CSZSR4R7M16
C	4802		CKSRYB104K16
C	4803		CSZS100M10
C	4804		CKSRYB104K16
C	4805		CSZSR330M10
C	4806		CKSRYB104K16
C	4807		CSZSR33M25
C	4808		CKSRYB104K25
C	4809		CKSSYB104K10
C	4810		CKSSYB104K10
C	4831		CKSSYB104K10
C	4832		CKSRYB104K25
C	4835		CKSRYB104K16
C	4836		CKSRYB104K16
C	4841		CKSRYB105K6R3
C	4843		CSZS100M10
C	4844		CKSRYB104K16
C	4851		CKSRYB104K16
C	4852	68µF/6.3V	CCH1440
C	4853		CKSRYB104K16
C	4854		CKSRYB104K16
C	4855	10µF	CCG1138
C	4856		CKSRYB332K50
C	4858	10µF	CCG1138
C	4859		CKSRYB104K16
C	4860		CKSYB106K6R3
C	4861		CKSYB106K6R3
C	4862		CCSRCH100D50
C	4863		CKSRYB683K16
C	4864		CKSRYB104K16
C	4865		CKSRYB471K50
C	4866		CKSRYB224K16
C	4867		CKSRYB104K16
C	4868		CKSRYB104K16
C	4869		CKSRYB104K16
C	4870		CKSRYB224K16
C	4871		CKSRYB224K16
C	4872		CKSRYB104K16
C	4873		CKSQYB105K16
C	4874		CKSQYB474K25
C	4875		CKSRYB104K16
C	4876		CKSQYB474K25
C	4877		CKSQYB105K16
C	4878		CKSRYB104K16
C	4879	22µF/12V	CCH1359
C	4881		CKSRYB104K25
C	4882		CKSRYB104K16
C	4883		CKSRYB104K16
C	4884		CKSRYB104K16
C	4885	68µF/6.3V	CCH1440
C	4886		CKSRYB104K16
C	4887		CKSRYB104K16
C	5001		CKSRYB104K16
C	5002		CKSRYB105K6R3
C	5005		CKSRYB105K6R3
C	5006		CKSRYB104K16
C	5007		CKSRYB105K6R3
C	5008		CKSQYB335K6R3
C	5011		CKSRYB332K50
C	5012		CKSRYB105K6R3
C	5013		CKSRYB152K50
C	5014		CKSRYB104K16
C	5015		CKSRYB473K50
C	5016		CKSRYB103K50
C	5017		CFHSQ221J50

=====Circuit Symbol and No.===Part Name Part No.

C	5018		CKSRYB473K50
C	5019	10µF	CCG1138
C	5020	10µF	CCG1138
C	5021		CKSQYB105K16
C	5022		CKSQYB105K16
C	5023	22pF	CCG1140
C	5024		CKSRYB223K50

Keyboard Unit

Consists of
Grille PCB
Panel PCB

L **M**

Unit Number : CWM8766(UC,RC,RD model)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC	5501	IC	RS-140
D	5502	LED	CL190UBX
D	5503	LED	CL190UBX
D	5504	LED	CL-195PG-CD
D	5505	LED	CL-195PG-CD
D	5509	LED	CL-195PG-CD
D	5510	LED	CL-195PG-CD
D	5513	LED	CL-195PG-CD
D	5515	LED	CL-195PG-CD
D	5516	LED	CL-195PG-CD
D	5518	LED	CL-195PG-CD
D	5521	LED	CL-195PG-CD
D	5522	LED	CL-195PG-CD
D	5524	LED	CL-195PG-CD
D	5526	LED	CL-195PG-CD
D	5527	Diode	UDZS6R8(B)
D	5529	LED	CL-195PG-CD
D	5530	LED	CL-195PG-CD
D	5531	LED	CL-195SR-CD
D	5534	LED	CL-195PG-CD
D	5901	LED	SML-010VT
S	5501	Push Switch	CSG1111
S	5502	Push Switch	CSG1111
S	5503	Push Switch	CSG1111
S	5504	Push Switch	CSG1111
S	5505	Push Switch	CSG1111
S	5506	Push Switch	CSG1111
S	5507	Push Switch	CSG1111
S	5508	Push Switch	CSG1111
S	5509	Push Switch	CSG1111
S	5510	Encoder	CSD1094
S	5511	Switch	CSX1047
S	5901	Push Switch	CSG1111

RESISTORS

R	5501	RS1/16S470J
R	5503	RS1/16S122J
R	5504	RS1/16S202J
R	5505	RS1/16S392J
R	5506	RS1/16S123J
R	5508	RS1/16S181J
R	5509	RS1/16S181J
R	5510	RS1/16S151J
R	5511	RS1/16S151J
R	5514	RS1/16S122J

=====Circuit Symbol and No.===Part Name Part No.

R	5515	RS1/16S202J
R	5516	RS1/16S392J
R	5520	RS1/16S181J
R	5521	RS1/16S181J
R	5522	RS1/16S151J
R	5524	RS1/16S151J
R	5525	RS1/16S472J
R	5530	RS1/16S181J
R	5531	RS1/16S181J
R	5532	RS1/16S181J
R	5533	RS1/16S151J
R	5534	RS1/16S151J
R	5535	RS1/16S121J
R	5536	RS1/16S181J
R	5538	RS1/16S181J
R	5540	RS1/16SS474J
R	5541	RS1/16S151J
R	5543	RS1/16S151J
R	5544	RS1/16S0R0J
R	5546	RS1/16S181J
R	5547	RS1/16SS472J
R	5548	RS1/16SS562J
R	5549	RS1/16SS471J
R	5550	RS1/16SS472J
R	5551	RS1/16SS102J
R	5552	RS1/16SS472J
R	5553	RS1/16SS472J
R	5554	RS1/16SS472J
R	5555	RS1/16SS153J
R	5556	RS1/16S181J
R	5557	RS1/16SS472J
R	5558	RS1/16S221J
R	5559	RS1/16S151J
R	5561	RS1/16S221J
R	5562	RS1/16S151J
R	5563	RS1/16S101J
R	5565	RS1/16S181J
R	5566	RS1/16S181J
R	5568	RS1/16S181J
R	5569	RS1/16S151J
R	5570	RS1/16S151J
R	5571	RS1/16S271J
R	5572	RS1/16S271J
R	5573	RS1/16S181J
R	5575	RS1/16S181J
R	5576	RS1/16S151J
R	5577	RS1/16S151J
R	5584	RS1/16SS0R0J
R	5585	RS1/16S390J
R	5904	RS1/16S151J

CAPACITORS

C	5509	CSZSQ100M6R3
C	5514	CKSRYB104K16
C	5515	CKSRYB104K16
C	5516	CKSRYB104K16

=====Circuit Symbol and No.===Part Name Part No.

Keyboard Unit

Consists of
Grille PCB
Panel PCB

L **M**

Unit Number : CWM8765(EW model)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC	5501	IC	RS-140
D	5501	Diode	DAN202U
D	5502	LED	CL190UBX
D	5503	LED	CL190UBX
D	5504	LED	CL-195PG-CD
D	5505	LED	CL-195PG-CD
D	5506	LED	CL-195SR-CD
D	5507	LED	CL-195SR-CD
D	5508	LED	CL-195SR-CD
D	5509	LED	CL-195PG-CD
D	5510	LED	CL-195PG-CD
D	5512	LED	CL-195SR-CD
D	5513	LED	CL-195PG-CD
D	5514	LED	CL-195SR-CD
D	5515	LED	CL-195PG-CD
D	5516	LED	CL-195PG-CD
D	5517	LED	CL-195SR-CD
D	5518	LED	CL-195PG-CD
D	5519	LED	CL-195SR-CD
D	5520	LED	CL-195SR-CD
D	5521	LED	CL-195PG-CD
D	5522	LED	CL-195PG-CD
D	5523	LED	CL-195SR-CD
D	5524	LED	CL-195PG-CD
D	5525	LED	CL-195SR-CD
D	5526	LED	CL-195PG-CD
D	5527	Diode	UDZS6R8(B)
D	5528	LED	CL-195SR-CD
D	5529	LED	CL-195PG-CD
D	5530	LED	CL-195PG-CD
D	5531	LED	CL-195SR-CD
D	5532	LED	CL-195SR-CD
D	5534	LED	CL-195PG-CD
D	5535	LED	CL-195SR-CD
D	5901	LED	SML-010VT
S	5501	Push Switch	CSG1111
S	5502	Push Switch	CSG1111
S	5503	Push Switch	CSG1111
S	5504	Push Switch	CSG1111
S	5505	Push Switch	CSG1111
S	5506	Push Switch	CSG1111
S	5507	Push Switch	CSG1111
S	5508	Push Switch	CSG1111
S	5509	Push Switch	CSG1111
S	5510	Encoder	CSD1094
S	5511	Switch	CSX1047
S	5901	Push Switch	CSG1111

RESISTORS

R	5503		RS1/16S122J
R	5504		RS1/16S202J
R	5505		RS1/16S392J
R	5506		RS1/16S123J
R	5508		RS1/16S181J
R	5509		RS1/16S181J
R	5510		RS1/16S151J
R	5511		RS1/16S151J
R	5512		RS1/16S181J
R	5514		RS1/16S122J
R	5515		RS1/16S202J
R	5516		RS1/16S392J
R	5517		RS1/16S181J
R	5519		RS1/16S181J
R	5520		RS1/16S181J
R	5521		RS1/16S181J
R	5522		RS1/16S151J
R	5524		RS1/16S151J
R	5525		RS1/16S472J
R	5527		RS1/16S181J
R	5528		RS1/16S181J
R	5530		RS1/16S181J
R	5531		RS1/16S181J
R	5532		RS1/16S181J
R	5533		RS1/16S151J
R	5534		RS1/16S151J
R	5535		RS1/16S121J
R	5536		RS1/16S181J
R	5537		RS1/16S181J
R	5538		RS1/16S181J
R	5539		RS1/16S181J
R	5540		RS1/16SS474J
R	5541		RS1/16S151J
R	5542		RS1/16S181J
R	5543		RS1/16S151J
R	5544		RS1/16S0R0J
R	5546		RS1/16S181J
R	5547		RS1/16SS472J
R	5548		RS1/16SS562J
R	5549		RS1/16SS471J
R	5550		RS1/16SS472J
R	5551		RS1/16SS102J
R	5552		RS1/16SS472J
R	5553		RS1/16SS472J
R	5554		RS1/16SS472J
R	5555		RS1/16SS153J
R	5556		RS1/16S181J
R	5557		RS1/16SS472J
R	5558		RS1/16S221J
R	5559		RS1/16S151J
R	5560		RS1/16S181J
R	5561		RS1/16S221J
R	5562		RS1/16S151J
R	5563		RS1/16S101J
R	5564		RS1/16S181J
R	5565		RS1/16S181J
R	5566		RS1/16S181J
R	5567		RS1/16S181J
R	5568		RS1/16S181J
R	5569		RS1/16S151J
R	5570		RS1/16S151J
R	5571		RS1/16S271J
R	5572		RS1/16S271J
R	5573		RS1/16S181J
R	5574		RS1/16S181J
R	5575		RS1/16S181J
R	5576		RS1/16S151J
R	5577		RS1/16S151J
R	5578		RS1/16S221J
R	5579		RS1/16S221J

=====Circuit Symbol and No.===		Part Name	Part No.
R	5580		RS1/16S181J
R	5581		RS1/16S221J
R	5584		RS1/16SS0R0J
R	5585		RS1/16S390J
R	5904		RS1/16S151J

CAPACITORS

C	5509		CSZSQ100M6R3
C	5514		CKSRYB104K16
C	5515		CKSRYB104K16
C	5516		CKSRYB104K16

D Unit Number : CWX2709
Unit Name : DVD Core Unit(MS3)

MISCELLANEOUS

IC	1101	IC	AN8703FH
IC	1201	IC	BA5985FM
IC	1202	IC	AN8471SAT1
IC	1301	IC	MNZS26EDCUB
IC	1501	IC	M2V64S40DTP-6L
IC	1502	IC	TC74VCX74FT
IC	1503	IC	MN677531KAUB
IC	1504	IC	TC74VCX74FT
IC	1505	IC	TC7PA04FU
IC	1507	IC	SM8707FV
IC	1602	IC	NJM2100M
IC	1604	IC	NJM2100V
IC	1605	IC	PCM1742KE
IC	1701	IC	PE5395A
IC	1702	IC	M5M5V216ATP-70HI
IC	1705	IC	PD6447A
IC	1706	IC	TC7SH08FU
Q	1101	Transistor	2SB1260
Q	1102	Transistor	2SB1260
Q	1103	Transistor	UN2211
Q	1104	Transistor	2SB709A
Q	1105	Transistor	2SD601A
Q	1201	Transistor	DTC124EU
Q	1501	Transistor	2SA1037K
D	1101	Diode	1SS355
D	1102	Diode	1SS355
D	1301	Diode	UDZ2R7(B)
D	1302	Chip LED	CL205IRXTU
L	1301	Inductor	CTF1409
L	1302	Inductor	CTF1394
L	1303	Inductor	CTF1395
L	1305	Inductor	CTF1409
L	1504	Inductor	CTF1394
L	1505	Inductor	CTF1409
L	1506	Inductor	CTF1473
L	1507	Inductor	CTF1473
L	1508	Inductor	CTF1473
L	1509	Inductor	CTF1399
L	1510	Inductor	CTF1409
L	1518	Inductor	CTF1385
L	1520	Inductor	CTF1399
L	1522	Inductor	CTF1395
L	1605	Inductor	CTF1379
L	1701	Inductor	CTF1395
L	1702	Inductor	CTF1409
L	1703	Inductor	CTF1473
L	1704	Inductor	CTF1473
X	1501	Radiator 27MHz	CSS1609
X	1701	Ceramic Resonator 4.97MHz	CSS1575
VR	1502	Semi-fixed 2.2kΩ(B)	CCP1444

=====Circuit Symbol and No.===		Part Name	Part No.

RESISTORS

R	1101		RS1/16SS101J
R	1102		RS1/16SS3R9J
R	1103		RS1/16SS3R9J
R	1104		RS1/16SS3R9J
R	1105		RS1/16SS3R9J
R	1106		RS1/16SS330J
R	1107		RS1/16SS3R9J
R	1108		RS1/16SS3R9J
R	1109		RS1/16SS3R9J
R	1110		RS1/16SS3R9J
R	1111		RS1/16SS272J
R	1112		RS1/16SS472J
R	1113		RS1/16SS102J
R	1124		RS1/16SS273J
R	1125		RS1/16SS273J
R	1126		RS1/16SS224J
R	1130		RS1/16SS0R0J
R	1131		RS1/16SS0R0J
R	1132		RS1/16SS0R0J
R	1133		RS1/16S2402D
R	1134		RS1/16S1002D
R	1135		RS1/16S2702D
R	1140		RS1/16SS105J
R	1141		RS1/16SS105J
R	1142		RS1/16SS105J
R	1151		RS1/16SS103J
R	1152		RS1/16SS103J
R	1201		RS1/16SS221J
R	1202		RS1/16SS393J
R	1203		RS1/16SS303J
R	1205		RS1/16SS0R0J
R	1206		RS1/16SS102J
R	1209		RS1/16SS221J
R	1210		RS1/16SS393J
R	1211		RS1/16SS393J
R	1212		RS1/16SS393J
R	1213		RS1/16SS393J
R	1214		RS1/16SS221J
R	1215		RS1/16SS1R0J
R	1216		RS1/16SS1R0J
R	1218		RS1/16SS221J
R	1219		RS1/16SS221J
R	1220		RS1/16SS221J
R	1221		RS1/16SS822J
R	1222		RS1/16SS822J
R	1223		RS1/16SS822J
R	1224		RS1/16SS563J
R	1225		RS1/16SS243J
R	1226		RS1/16SS473J
R	1227		RS1/16SS473J
R	1228		RS1/16SS1R0J
R	1229		RS1/16SS1R0J
R	1230		RS1/16SS1R0J
R	1232		RS1/16SS822J
R	1233		RS1/16SS243J
R	1234		RS1/16S391J
R	1235		RS1/16S471J
R	1236		RS1/16SS513J
R	1237		RS1/16SS513J
R	1301		RS1/16SS222J

=====Circuit Symbol and No.===Part Name		Part No.
R	1321	RS1/16SS104J
R	1322	RS1/16SS0R0J
R	1323	RS1/16SS221J
R	1324	RS1/16SS221J
R	1334	RS1/16SS221J
R	1336	RS1/16SS103J
R	1337	RS1/16SS103J
R	1338	RS1/16SS472J
R	1339	RS1/16SS273J
R	1340	RS1/16SS472J
R	1341	RS1/16SS273J
R	1342	RS1/16SS273J
R	1344	RS1/16SS273J
R	1349	RS1/16SS562J
R	1350	RS1/16SS242J
R	1352	RS1/16S2702D
R	1353	RS1/16SS102J
R	1360	RS1/16SS153J
R	1361	RS1/16SS105J
R	1362	RS1/16SS473J
R	1363	RS1/16SS101J
R	1364	RS1/16SS123J
R	1365	RS1/16SS101J
R	1367	RS1/16SS473J
R	1369	RS1/16SS473J
R	1375	RS1/16SS103J
R	1376	RS1/16SS103J
R	1377	RS1/16SS103J
R	1378	RS1/16SS103J
R	1379	RS1/16SS103J
R	1380	RS1/16SS103J
R	1383	RS1/16SS103J
R	1391	RS1/16SS103J
R	1392	RS1/16SS103J
R	1393	RS1/16SS103J
R	1394	RS1/16SS471J
R	1395	RS1/16SS0R0J
R	1396	RS1/16SS0R0J
R	1400	RS1/16SS221J
R	1419	RS1/16SS221J
R	1420	RS1/16SS221J
R	1425	RAB4CQ221J
R	1426	RAB4CQ221J
R	1501	RS1/16SS220J
R	1502	RAB4CQ220J
R	1503	RS1/16S101J
R	1504	RAB4CQ220J
R	1505	RS1/16S101J
R	1508	RAB4CQ220J
R	1512	RAB4CQ220J
R	1518	RAB4CQ220J
R	1522	RAB4CQ220J
R	1523	RS1/16S0R0J
R	1527	RAB4CQ220J
R	1533	RS1/16SS201J
R	1534	RAB4CQ220J
R	1538	RAB4CQ220J
R	1539	RS1/16SS221J
R	1542	RS1/16SS103J
R	1543	RS1/16SS680J
R	1544	RS1/16SS0R0J
R	1545	RS1/16SS0R0J
R	1549	RS1/16SS0R0J
R	1550	RS1/16SS0R0J
R	1551	RS1/16SS0R0J

=====Circuit Symbol and No.===Part Name		Part No.
R	1552	RS1/16SS471J
R	1553	RS1/16S68R0D
R	1554	RS1/16SS471J
R	1555	RS1/16SS0R0J
R	1556	RS1/16SS750J
R	1557	RS1/16SS0R0J
R	1558	RS1/16SS622J
R	1559	RAB4CQ0R0J
R	1560	RS1/16SS122J
R	1561	RS1/16SS162J
R	1562	RS1/16SS0R0J
R	1563	RS1/16SS4R7J
R	1564	RAB4CQ0R0J
R	1565	RS1/16S101J
R	1566	RS1/16S101J
R	1567	RAB4CQ0R0J
R	1568	RS1/16S101J
R	1569	RS1/16S101J
R	1570	RS1/16S101J
R	1571	RS1/16S220J
R	1572	RAB4CQ0R0J
R	1573	RS1/16SS473J
R	1574	RAB4CQ0R0J
R	1575	RAB4CQ0R0J
R	1576	RAB4CQ0R0J
R	1577	RAB4CQ0R0J
R	1578	RS1/16SS472J
R	1579	RS1/16SS101J
R	1587	RS1/16SS101J
R	1595	RS1/16SS472J
R	1596	RS1/16SS472J
R	1597	RS1/16SS104J
R	1598	RS1/16SS270J
R	1601	RS1/16SS821J
R	1602	RS1/16SS821J
R	1603	RS1/16SS0R0J
R	1604	RS1/16SS0R0J
R	1605	RS1/16SS102J
R	1606	RS1/16SS102J
R	1607	RS1/16SS222J
R	1608	RS1/16SS222J
R	1609	RS1/16SS472J
R	1610	RS1/16SS472J
R	1611	RS1/16SS472J
R	1612	RS1/16SS472J
R	1613	RS1/16SS103J
R	1614	RS1/16SS103J
R	1615	RS1/16SS472J
R	1616	RS1/16SS472J
R	1626	RS1/16SS0R0J
R	1627	RS1/16SS0R0J
R	1628	RS1/16SS0R0J
R	1637	RS1/16SS104J
R	1638	RS1/16SS104J
R	1642	RS1/16SS221J
R	1643	RS1/16SS221J
R	1647	RS1/16SS221J
R	1648	RS1/16SS221J
R	1653	RS1/16SS473J
R	1656	RS1/16SS102J
R	1701	RS1/16SS473J
R	1704	RS1/16SS473J
R	1706	RS1/16SS104J
R	1707	RS1/16SS221J
R	1708	RS1/16SS221J

=====Circuit Symbol and No.===Part Name			Part No.
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R	1714		RS1/16SS221J
R	1715		RS1/16SS473J
R	1716		RS1/16SS221J
R	1717		RS1/16SS104J
R	1718		RS1/16SS104J
R	1720		RS1/16SS104J
R	1721		RS1/16SS104J
R	1722		RS1/16SS104J
R	1723		RS1/16SS104J
R	1724		RS1/16SS222J
R	1725		RS1/16SS223J
R	1726		RS1/16SS104J
R	1727		RS1/16SS104J
R	1728		RS1/16SS104J
R	1730		RS1/16SS221J
R	1731		RS1/16SS104J
R	1732		RS1/16SS0R0J
R	1733		RS1/16SS104J
R	1734		RS1/16SS221J
R	1735		RS1/16SS104J
R	1736		RS1/16SS104J
R	1737		RS1/16SS104J
R	1738		RS1/16SS104J
R	1739		RS1/16SS330J
R	1740		RS1/16SS0R0J
R	1741		RS1/16SS0R0J
R	1742		RS1/16SS473J
R	1746		RS1/16SS104J
R	1748		RS1/16SS104J
R	1749		RS1/16SS103J
R	1750		RS1/16SS473J
R	1751		RS1/16SS103J
R	1752		RS1/16SS104J
R	1753		RS1/16SS104J
R	1754		RS1/16SS104J
R	1756		RS1/16SS104J
R	1757		RS1/16SS472J
R	1758		RS1/16SS104J
R	1759		RS1/16SS104J
R	1760		RS1/16S1002D
R	1761		RS1/16SS105J
R	1762		RS1/16SS473J
R	1763		RS1/16SS104J
R	1764		RS1/16SS104J
R	1765		RS1/16SS104J
R	1767		RS1/16SS104J
R	1768		RS1/16SS473J
R	1769		RS1/16SS104J
R	1770		RS1/16SS473J
R	1771		RS1/16SS473J
R	1773		RS1/16SS103J
R	1790		RS1/16SS473J
R	1792		RS1/16SS0R0J
R	1794		RS1/16SS222J
R	1795		RS1/16SS104J
R	1796		RS1/16SS473J
R	1797		RS1/16SS104J
R	1798		RS1/16SS104J
R	1801		RS1/16SS104J
R	1802		RS1/16SS104J
R	1803		RS1/16SS104J
R	1804		RS1/16SS102J
R	1805		RS1/16SS102J

=====Circuit Symbol and No.===Part Name			Part No.
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CAPACITORS

C	1101		CSZSC470M16
C	1102		CSZSR470M6R3
C	1103		CKSSYB104K10
C	1104		CKSSYB103K16
C	1105		CSZSR101M6R3
C	1106		CKSSYB104K10
C	1107		CKSSYB103K16
C	1108		CKSSYB104K10
C	1109		CKSRYB473K25
C	1110		CKSRYB473K25
C	1111		CKSSYB103K16
C	1112		CKSRYB105K10
C	1113		CKSRYB105K10
C	1114		CKSSYB103K16
C	1121		CKSSYB221K50
C	1122		CKSRYB393K16
C	1124		CKSSYB221K50
C	1125		CKSSYB104K10
C	1126		CKSSYB104K10
C	1127		CKSSYB104K10
C	1128		CKSRYB472K50
C	1129		CKSSYB104K10
C	1132		CKSRYB561K50
C	1133		CKSRYB561K50
C	1134		CKSRYB273K16
C	1135		CKSSYB473K10
C	1136		CKSSYB104K10
C	1137		CKSSYB104K10
C	1138		CKSSYB104K10
C	1139		CKSSYB104K10
C	1201		CKSSYB104K10
C	1204		CEV101M16
C	1205		CKSRYB104K16
C	1206		CKSRYB103K50
C	1207		CKSRYB103K50
C	1208		CCSSCH5R0C50
C	1209		CCSSCH470J50
C	1213		CKSRYB104K25
C	1214		CKSRYB104K25
C	1215		CKSSYB104K10
C	1216		CSZSC470M16
C	1217		CKSRYB104K25
C	1218		CSZSC470M16
C	1221		CKSRYB104K25
C	1301		CKSSYB104K10
C	1302		CKSSYB104K10
C	1303		CKSSYB224K6R3
C	1304		CKSSYB104K10
C	1305		CKSSYB224K6R3
C	1306		CKSSYB471K50
C	1307		CKSSYB104K10
C	1308		CKSRYB224K10
C	1309		CKSSYB104K10
C	1310		CKSSYB104K10
C	1311		CKSSYB103K16
C	1312		CKSSYB103K16
C	1313		CKSSYB104K10
C	1314		CKSRYB224K10
C	1315		CKSRYB102K50
C	1316		CKSRYB393K16
C	1317		CKSSYB104K10
C	1318		CKSSYB103K16
C	1319		CKSSYB104K10
C	1320		CKSSYB103K16
C	1329		CKSSYB104K10

=====Circuit Symbol and No.===Part Name			Part No.
C	1330		CKSRYB183K25
C	1331		CCSSCH470J50
C	1332		CKSRYB224K10
C	1333		CKSRYB224K10
C	1334		CKSRYB102K50
C	1335		CKSSYB562K25
C	1336		CKSSYB104K10
C	1337		CKSRYB102K50
C	1338		CKSRYB102K50
C	1339		CKSRYB102K50
C	1340		CKSSYB104K10
C	1341		CCSSCH101J50
C	1342		CKSRYB391K50
C	1343		CKSRYB471K50
C	1344		CKSRYB331K50
C	1346		CKSRYB224K10
C	1347		CKSSYB104K10
C	1348		CKSSYB104K10
C	1349		CKSSYB104K10
C	1350		CKSSYB104K10
C	1351		CKSSYB104K10
C	1352		CKSSYB104K10
C	1501		CKSRYB224K10
C	1502		CKSRYB224K10
C	1503		CKSRYB224K10
C	1504		CKSRYB224K10
C	1505		CKSRYB224K10
C	1507		CKSRYB224K10
C	1508		CKSRYB224K10
C	1510		CSZSC101M10
C	1513		CKSRYB224K10
C	1514		CKSRYB224K10
C	1515		CKSRYB224K10
C	1516		CKSRYB224K10
C	1517		CKSRYB224K10
C	1518		CKSRYB224K10
C	1519		CKSRYB224K10
C	1520		CKSRYB224K10
C	1521		CKSRYB224K10
C	1522		CKSRYB224K10
C	1523		CKSRYB224K10
C	1524		CKSRYB224K10
C	1525		CKSSYB104K10
C	1526		CKSRYB224K10
C	1527		CKSRYB224K10
C	1528		CKSSYB104K10
C	1529		CKSRYB224K10
C	1530		CKSRYB224K10
C	1531		CKSSYB471K50
C	1532		CKSSYB104K10
C	1533		CKSSYB104K10
C	1534		CKSRYB224K10
C	1535		CKSSYB104K10
C	1538		CKSSYB104K10
C	1539		CKSRYB105K10
C	1540		CKSRYB105K10
C	1542		CKSSYB104K10
C	1543		CSZS4R7M16
C	1544		CKSSYB104K10
C	1547		CSZSR330M10
C	1548		CKSSYB104K10
C	1549		CKSSYB104K10
C	1550		CKSSYB104K10
C	1551		CKSSYB104K10
C	1552		CKSSYB104K10

=====Circuit Symbol and No.===Part Name			Part No.
C	1554		CKSSYB104K10
C	1555		CKSSYB104K10
C	1556		CKSSYB104K10
C	1557		CKSSYB104K10
C	1558		CKSSYB104K10
C	1559		CKSSYB104K10
C	1560		CKSSYB104K10
C	1562		CKSSYB104K10
C	1563		CKSSYB104K10
C	1564		CKSSYB104K10
C	1566		CCSSCH7R0D50
C	1567		CCSSCH7R0D50
C	1605		CKSSYB471K50
C	1606		CKSSYB471K50
C	1609		CKSRYB104K16
C	1610		CKSRYB224K10
C	1611		CSZSR100M16
C	1612		CKSQYB225K10
C	1615		CCSRCH471J50
C	1616		CCSRCH471J50
C	1617		CCSRCH471J50
C	1618		CCSRCH471J50
C	1619		CKSRYB104K16
C	1641		CKSRYB104K16
C	1650		CKSYB475K16
C	1651		CKSYB475K16
C	1676		CSZSR100M10
C	1701		CKSRYB224K10
C	1702		CKSRYB224K10
C	1703		CKSRYB224K10
C	1706		CKSRYB224K10
C	1707		CKSRYB224K10
C	1708		CKSSYB471K50
C	1710		CKSRYB224K10
C	1711		CKSSYB103K16
C	1712		CKSSYB103K16
C	1713		CKSRYB224K10
C	1716		CKSRYB224K10
C	1717		CKSSYB104K10
C	1718		CKSRYB224K10
C	1719		CKSSYB104K10
C	1720		CKSRYB224K10
C	1721		CKSSYB104K10
C	1722		CKSRYB224K10
C	1723		CKSRYB224K10
C	1724		CKSSYB103K16
C	1727		CKSSYB224K6R3

E Unit Number : CWX2752
Unit Name : Compoud Unit(A)

Q	1299	Photo-transistor	CPT231SCTD
S	1201	Switch(12cm)	CSN1051
S	1202	Switch(8cm)	CSN1051
S	1203	Switch(DISC SENS)	CSN1051
S	1204	Spring Switch(DISC SENS)	CSN1052
S	1205	Spring Switch(8cm)	CSN1052
R	1298		RS1/16S0R0J
R	1299		RS1/16S0R0J

F Unit Number : CWX2753
Unit Name : Compoud Unit(B)

S	1206	Switch(CLAMP)	CSN1051

=====Circuit Symbol and No.===Part Name Part No.
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N Unit Number : CZW3087
Unit Name : Main Unit

MISCELLANEOUS

IC	3801	IC	BA00AST
IC	3802	IC	BA6247FP
IC	3803	IC	TA78L05F
IC	3804	IC	TC7S14FU
IC	3805	Photo-interrupter	GP2L24B
Q	3801	Transistor	DTC124EU
Q	3802	Transistor	2SA1037K
Q	3803	Transistor	DTC124EU
D	3801	Diode	UDZS5R6(B)
D	3802	Diode	1SS355
L	3801	Inductor	LCTA150J2520
L	3802	Inductor	LCTA150J2520

RESISTORS

R	3801	RS1/16S103J
R	3802	RS1/16S222J
R	3803	RS1/16S471J
R	3804	RS1/16S102J
R	3805	RS1/16S102J
R	3806	RS1/16S102J
R	3807	RS1/16S102J
R	3808	RS1/16S103J
R	3809	RS1/16S222J
R	3810	RS1/16S222J
R	3811	RS1/16S102J
R	3812	RS1/16S102J
R	3813	RS1/16S472J
R	3814	RS1/16S102J
R	3815	RS1/16S0R0J
R	3816	RS1/16S0R0J
R	3817	RS1/16S0R0J
R	3818	RS1/16S473J
R	3819	RS1/16S0R0J
R	3821	RS1/16S473J
R	3822	RS1/16S512J
R	3823	RS1/16S0R0J

CAPACITORS

C	3801	CKSQYB105K16
C	3802	CKSQYB105K16
C	3803	CKSRYB104K16
C	3804	CKSRYB104K16
C	3805	CKSRYB104K16
C	3806	CKSRYB223K50
C	3807	CKSRYB223K50
C	3808	CEVW101M16
C	3809	CEVW101M16
C	3810	CKSRYB104K16
C	3811	CEV100M16
C	3812	CKSRYB104K16
C	3813	CKSRYB102K50
C	3815	CKSQYB104K50
C	3819	CEVW101M16

O Unit Number : CZW3088
Unit Name : SW Unit

S	3831	Switch (ANGLE)	CSN1052
S	3832	Switch (LIFT)	CSN1052

=====Circuit Symbol and No.===Part Name Part No.
--- ------ -- -------------------------

P Unit Number : CZW3089
Unit Name : Volume Unit

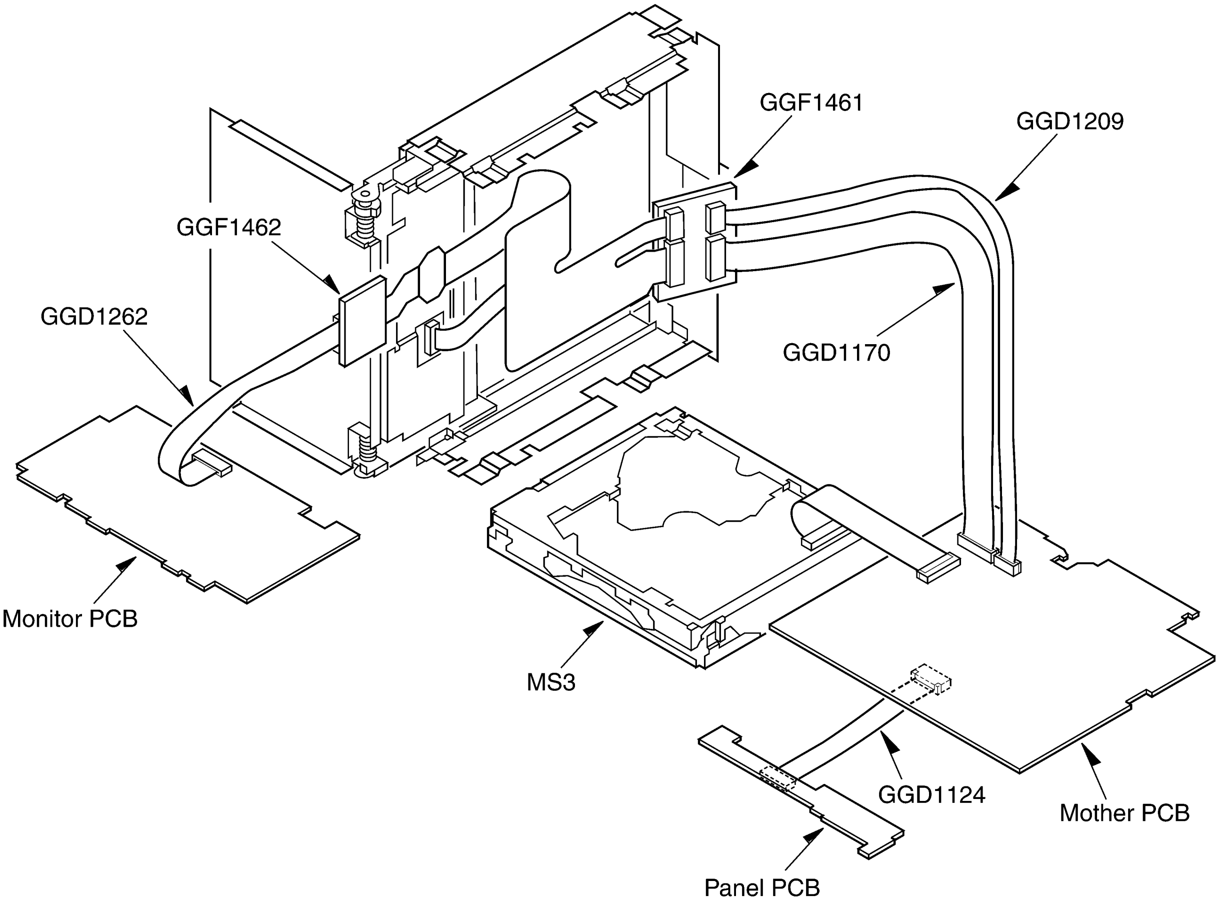
VR	3841	Rotary (Angle sense)	CCW1025

Miscellaneous Parts List

		Pickup Unit(Service)(DP5)	CXX1639
M	1	Motor Unit(LOADING)	CXB8687
M	2	Motor Unit(CARRIAGE)	CXB8688
M	3	Motor(SPINDLE)	CXM1211
M	3001	Motor Unit(Position)	CXB9515
M	3002	Motor Unit(Angle)	CXB9516
		Fan Motor	CXM1262
		LCD Panel	CWX2671
		LCD	CAW1805

6. ADJUSTMENT

6.1 JIG CONNECTION DIAGRAM


GGF1461
GGD1209
GGF1462
GGD1262
GGD1170
Monitor PCB
MS3
GGD1124
Mother PCB
Panel PCB

After connecting a tuner unit , please perform adjustment.

Function	Name	Jig No.
Mother PCB(CN805) <-> Main Unit(CN3801)	PCB	GGF1461
Mother PCB(CN805) <-> GGF1461	40P FFC	GGD1170
Mother PCB(CN805) <-> GGF1461	20P FFC	GGD1209
Mother PCB(CN803) <-> Monitor PCB(CN4461)	PCB	GGF1462
Monitor PCB(CN4461) <-> GGF1462	33P FFC	GGD1262
Mother PCB(CN101) <-> Panel PCB(CN5901)	17PFFC	GGD1124

6.2 DVD ADJUSTMENT

1) Precautions

This product uses 5V and 3.3V as standard voltages. The electrical potential that is the reference for signals, is not GND, but VREF (approximately 2.2V) and VHALF (approximately 1.65V).

During product adjustments, if the reference voltage is mistakenly taken as GND, and a grounding contact is made, not only would it be impossible to measure the accurate electrical potential, but also the servo motor would malfunction, resulting in the application of a strong impact on the pick up. The following precautionary measures should be strictly adhered to, in order to avoid such problems.

The reference voltage and GND should not be confused when using the minus probe of a measurement device. When an oscilloscope is being used special care should be taken to make sure that the reference voltage is not connected to the probe of ch1 (on the minus side), while the probe of ch2 (on the minus side), is connected to GND. Further, since the body frame of most measurement devices have the same electrical potential as the minus side of the probe, the body frame of the measurement device should be set to floating ground.

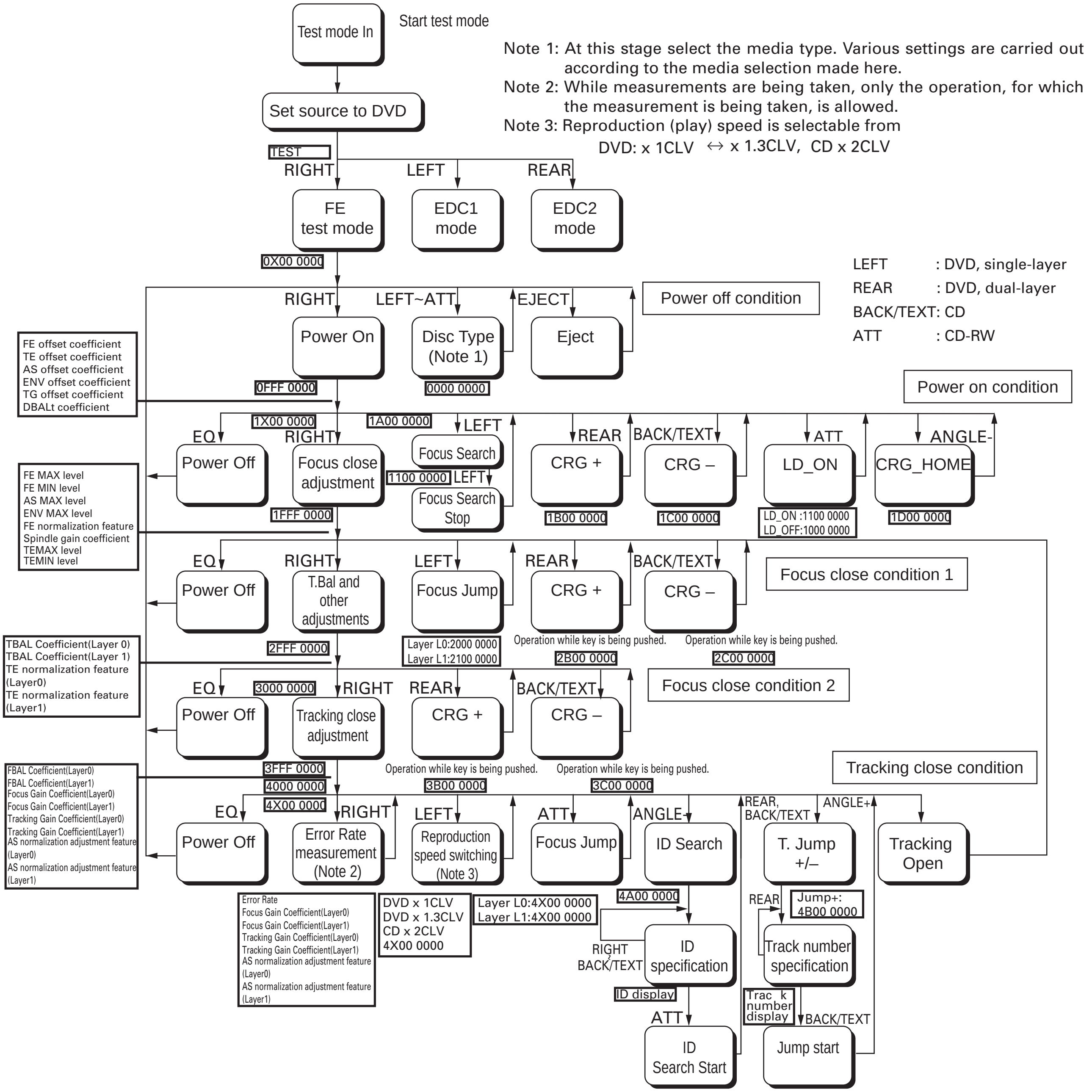
If the reference voltage is connected to GND by mistake, turn the regulator OFF immediately, or turn the power OFF.

- Remove the filters and wires used for measurements only after the regulator has been turned OFF.
- After the power supply is turned on, regulator ON the following adjustment and measurement are promptly done.
- Whenever the product is in the test mode, the software will not take any protective action. For this reason, special care should be taken to make sure that no mechanical or electrical shock could be applied to the product when taking measurements in the test mode.
- Whenever the EJECT key is pressed to eject the disk, no other keys, other than the EJECT key, should be pressed until the disk eject action has been completed.
- Press the EJECT key only after the disk has stopped completely.
- If the product hangs up turn the power OFF immediately.
- Laser didoes may be damaged, if the volume switch for the laser power adjustment of the pick up unit, is turned.

Attention)

- Test mode starting procedure
  ACC ON while pressing the ANGLE- and EQ keys together.
- Test mode stopping procedure
  ACC and Backup OFF.

● Front-End test mode flow chart



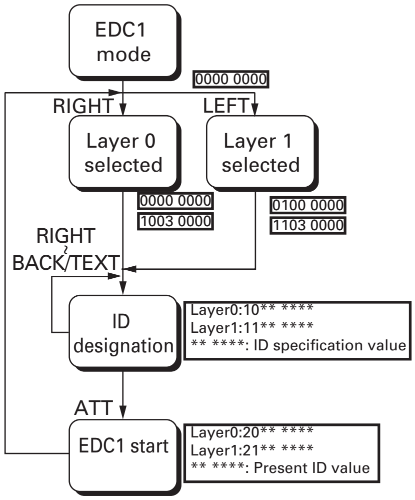
Note 1: At this stage select the media type. Various settings are carried out according to the media selection made here.

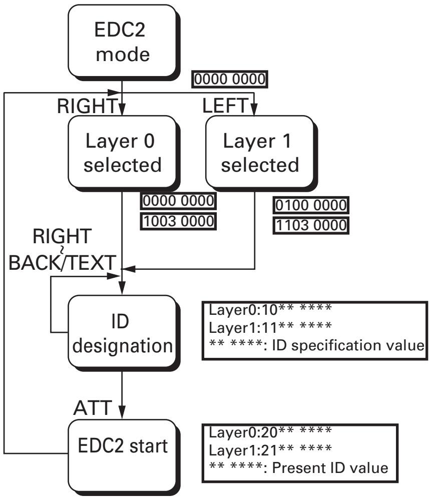
Note 2: While measurements are being taken, only the operation, for which the measurement is being taken, is allowed.

Note 3: Reproduction (play) speed is selectable from DVD: x 1CLV ↔ x 1.3CLV, CD x 2CLV

LEFT : DVD, single-layer
REAR : DVD, dual-layer
BACK/TEXT: CD
ATT : CD-RW

Test mode In
Start test mode
Set source to DVD
TEST
RIGHT
LEFT
REAR
FE test mode
EDC1 mode
EDC2 mode
0X00 0000
RIGHT
LEFT~ATT
EJECT
Power off condition
Power On
Disc Type (Note 1)
Eject
0FFF 0000
0000 0000
Power on condition
FE offset coefficient
TE offset coefficient
AS offset coefficient
ENV offset coefficient
TG offset coefficient
DBALt coefficient
1X00 0000
1A00 0000
EQ
RIGHT
LEFT
REAR
BACK/TEXT
ATT
ANGLE-
Power Off
Focus close adjustment
Focus Search
1100 0000
LEFT
Focus Search Stop
CRG +
CRG –
LD_ON
CRG_HOME
1FFF 0000
1B00 0000
1C00 0000
LD_ON :1100 0000
LD_OFF:1000 0000
1D00 0000
FE MAX level
FE MIN level
AS MAX level
ENV MAX level
FE normalization feature
Spindle gain coefficient
TEMAX level
TEMIN level
EQ
RIGHT
LEFT
REAR
BACK/TEXT
Focus close condition 1
Power Off
T.Bal and other adjustments
Focus Jump
CRG +
CRG –
Layer L0:2000 0000
Layer L1:2100 0000
Operation while key is being pushed.
Operation while key is being pushed.
2FFF 0000
2B00 0000
2C00 0000
TBAL Coefficient(Layer 0)
TBAL Coefficient(Layer 1)
TE normalization feature (Layer0)
TE normalization feature (Layer1)
EQ
3000 0000
RIGHT
REAR
BACK/TEXT
Focus close condition 2
Power Off
Tracking close adjustment
CRG +
CRG –
3FFF 0000
Operation while key is being pushed.
Operation while key is being pushed.
Tracking close condition
4000 0000
3B00 0000
3C00 0000
4X00 0000
FBAL Coefficient(Layer0)
FBAL Coefficient(Layer1)
Focus Gain Coefficient(Layer0)
Focus Gain Coefficient(Layer1)
Tracking Gain Coefficient(Layer0)
Tracking Gain Coefficient(Layer1)
AS normalization adjustment feature (Layer0)
AS normalization adjustment feature (Layer1)
EQ
RIGHT
LEFT
ATT
ANGLE-
REAR, BACK/TEXT
ANGLE+
Power Off
Error Rate measurement (Note 2)
Reproduction speed switching (Note 3)
Focus Jump
ID Search
T. Jump +/–
Tracking Open
Error Rate
Focus Gain Coefficient(Layer0)
Focus Gain Coefficient(Layer1)
Tracking Gain Coefficient(Layer0)
Tracking Gain Coefficient(Layer1)
AS normalization adjustment feature (Layer0)
AS normalization adjustment feature (Layer1)
DVD x 1CLV
DVD x 1.3CLV
CD x 2CLV
4X00 0000
Layer L0:4X00 0000
Layer L1:4X00 0000
4A00 0000
REAR
Jump+: 4B00 0000
RIGHT
BACK/TEXT
ID specification
Track number specification
ID display
Trac k number display
ATT
BACK/TEXT
ID Search Start
Jump start


EDC1
mode
0000 0000
RIGHT
LEFT
Layer 0
selected
Layer 1
selected
0000 0000
1003 0000
0100 0000
1103 0000
RIGHT
~
BACK/TEXT
ID
designation
Layer0:10** ****
Layer1:11** ****
** ****: ID specification value
ATT
EDC1 start
Layer0:20** ****
Layer1:21** ****
** ****: Present ID value


EDC2
mode
0000 0000
RIGHT
LEFT
Layer 0
selected
Layer 1
selected
0000 0000
1003 0000
0100 0000
1103 0000
RIGHT
~
BACK/TEXT
ID
designation
Layer0:10** ****
Layer1:11** ****
** ****: ID specification value
ATT
EDC2 start
Layer0:20** ****
Layer1:21** ****
** ****: Present ID value

F-close and F-search cannot be executed, unless LD-ON is set.
[If F-close isn't executed within 9 seconds after LD-ON,
it switches to LD-OFF automatically. And even if F-search is executed
within 9 seconds after LD-ON, it also switches to LD-OFF.]

The track number designation is selected from the track numbers already prepared for selection.
Switching to cyclic operation is made at step REAR, and the decision is finalized (entered) in step BACK/TEXT.

For CD: Tracks 1, 4, 10, 11 and 32.

For DVD: Tracks 1, 4, 10, 11, 32, 64 and 100.

Method for designating an ID address:

- A number of digits are determined through commands RIGHTand LEFT. Numerical UP/DOWN operations are performed through commands REAR and BACK/TEXT. The decision is finalized (entered) with command ATT.

OSD display

Error Code List

Error status from DVD micurocomputer	Contents	Display
0X50	Mecha. error	No dislay
0X40	No disc	No dislay
0X30	The temperature is abnormal	Thermal Protection in Motion
0X20	Read error	Error-02-XX
0XE2	Non-playable disc	NON-PLAYABLE DISC
0X90	Drrerent region disc	DFFERENT REGION DISC
0XFF	Undefined error	Error-FF

Error code of read error(Part of XX)

Error Code	Contents	Display
0X99	Data cannot read	Please condirm the disc
0X80	The address cannot be found	Please condirm the disc
0X90	Focus error	Please condirm the disc
0X91	Spindle lock NG	DVD is stopping because mechanism detected abnormality
0X92	Carrige home NG	DVD is stopping because mechanism detected abnormality
0X93	FOK error	Please condirm the disc
0X94	ID/Subcode cannot be read	Please condirm the disc
0X95	High spindle rotation	Please condirm the disc
0X96	Row spindle rotation	DVD is stopping because mechanism detected abnormality
0X98	TOC cannot be found	Please condirm the disc
0X9A	AV chip error	DVD is stopping because mechanism detected abnormality
0X9B	RecaveryNG(BE)	DVD is stopping because mechanism detected abnormality

● Skew adjustment

If any of the following replacements have been performed on the system, adjustments for pick up, must be conducted:

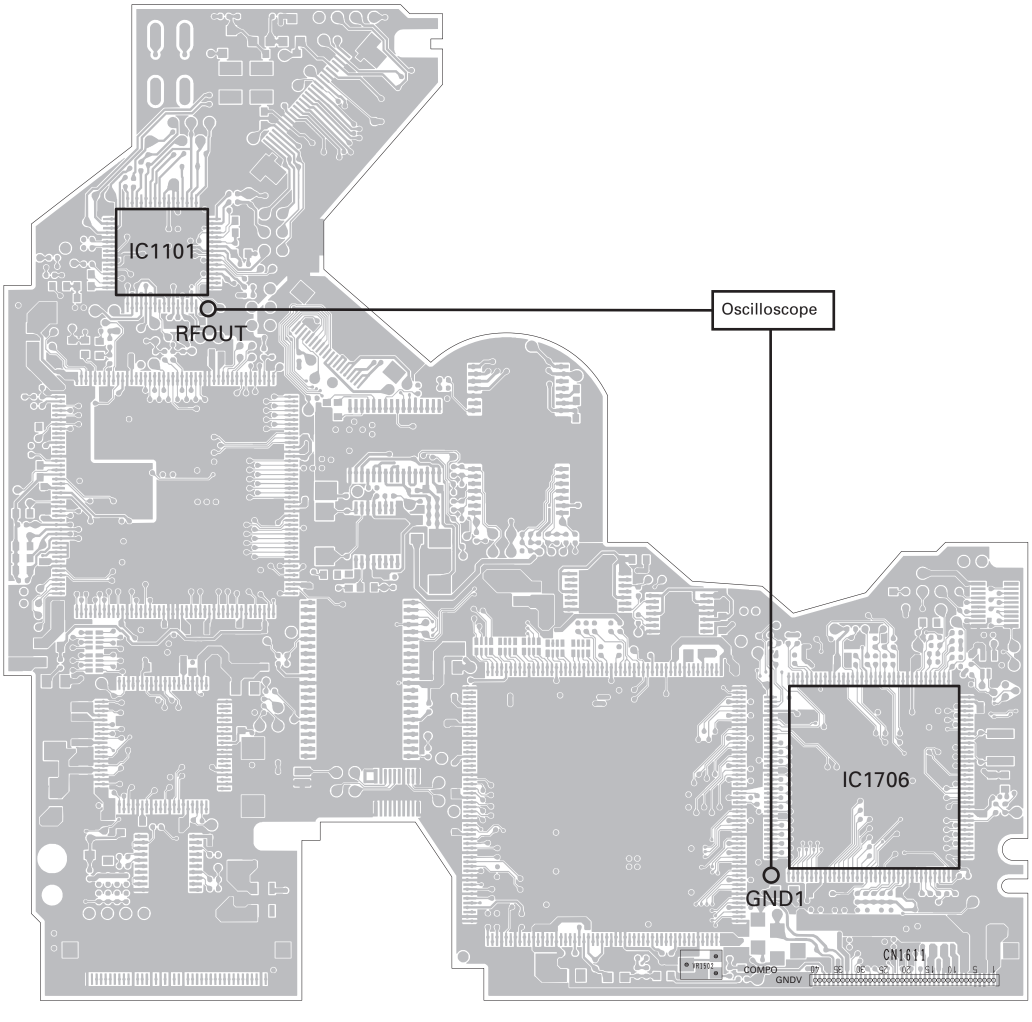
1. Pick up unit replacement
2. Spindle motor replacement
3. Carriage chassis replacement
4. Pick up unit main shaft replacement
5. Pick up unit sub-shaft replacement

Measurement device and tools : Oscilloscope
Allen key wrench
40-pin flexible extension
Screw rock(GYL1001)

Disk used : GGV1018
Measurement reference : GND1
Measurement point : RFOUT

Skew adjustment connection diagram

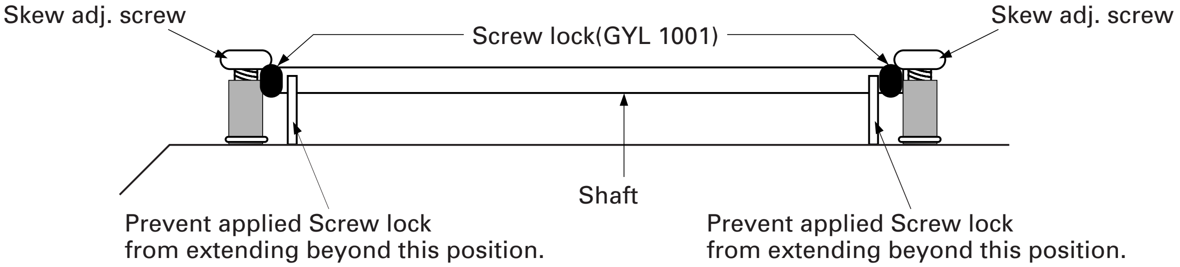
- DVD core unit (MS3)

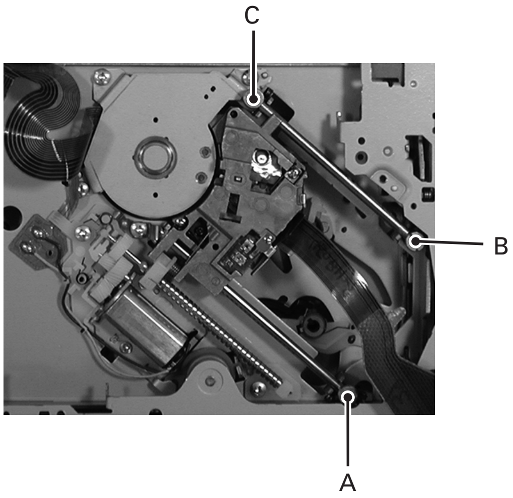


Symptoms in case of poor adjustment: Error efficiency deteriorated: 10-3 (Optimum value: 10-4 or lower)
High jitter of the RF signal
RF waveform deformed
Unstable operation in tracking closing and servo control
Caution: Avoid exposing your eyes to laser beams for a long time.
Preparation for adjustment: Clean both ends of the shafts.
Use brand new skew screws supplied with the service kit CXX1639.

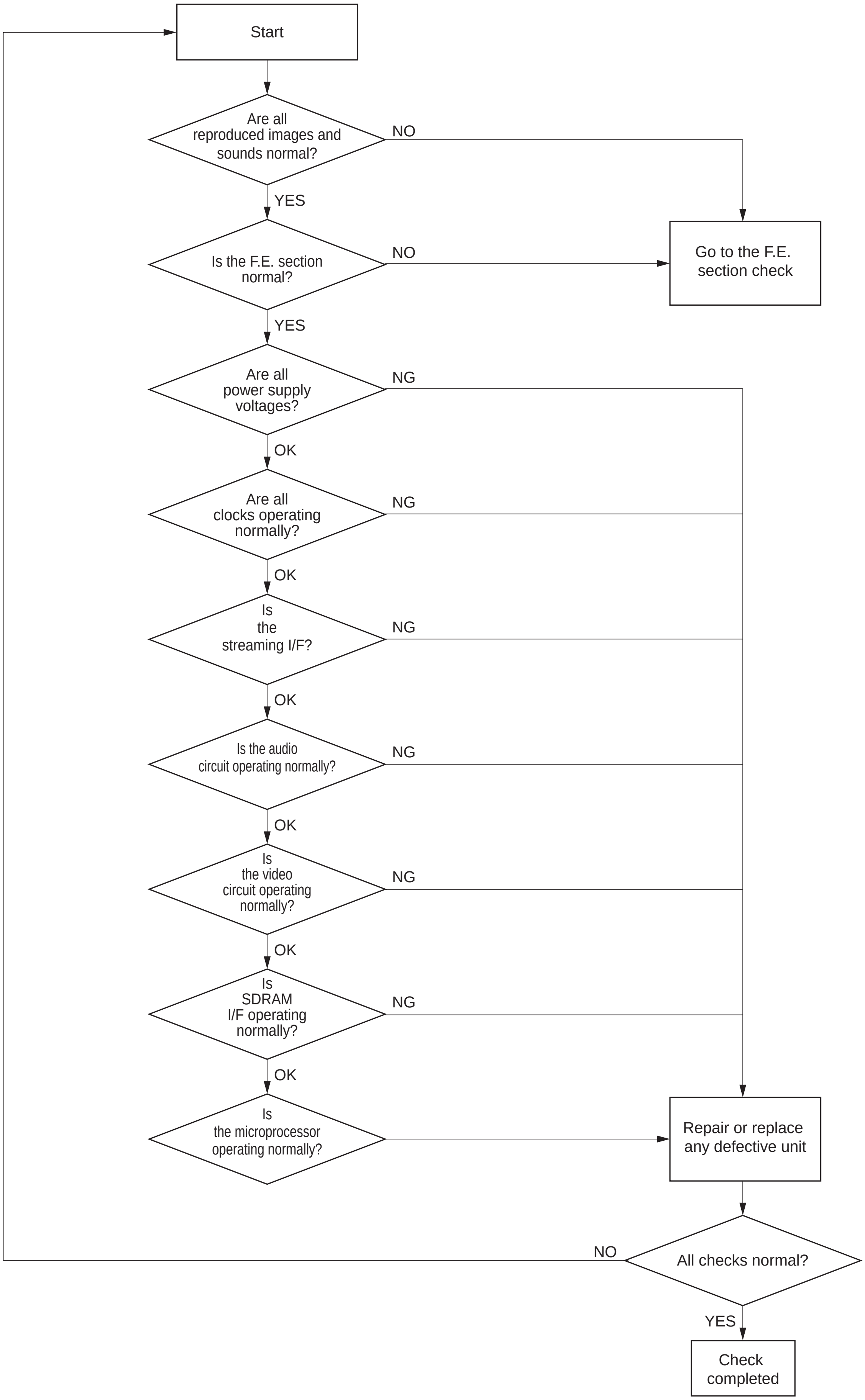
Procedures:

1. Place the DVD mechanism module upside down.
2. After replacing the pickup (by referring to the procedures of “Removing the Pickup.”), roughly adjust the three skew screws through visual check so that the pickup is mounted in parallel to the CRG chassis around the inner and outer tracks.
3. Connect an oscilloscope as shown in the connecting diagram.
4. Turn on the power of the product. Load the test disc (GGV1018).
5. In the front-end test mode, set the disc type to DVD layer 1. Move the pickup toward the inner tracks.
6. Turn on the laser diodes.
7. With the focus servo closed, complete all automatic adjustments. Close the tracking servo, and then complete all automatic adjustments.
8. Observing the RF waveform on the oscilloscope, slightly turn the skew adj. screw C to maximize the RF level.
   Next, move the pickup toward the outer tracks. Slightly turn the skew adj. screw B to maximize the RF level.
   Turn the skew adj. screws A and B in the same direction keeping their rotating angles the same until the RF level becomes the maximum.
   Lastly, move the pickup toward the inner tracks. Turn the skew adj. screw C so that the RF level becomes the maximum.
   Repeat the step 8 three times.
9. Turn off the power in the test mode. After confirming that the disc has stopped, eject the disc.
10. Apply Screw lock(GYL 1001) to the skew adj. screws and the shafts.


Skew adj. screw
Screw lock(GYL 1001)
Skew adj. screw
Shaft
Prevent applied Screw lock from extending beyond this position.
Prevent applied Screw lock from extending beyond this position.



Back end section check flow chart


Start
Are all reproduced images and sounds normal?
NO
YES
Go to the F.E. section check
Is the F.E. section normal?
NO
YES
Are all power supply voltages?
NG
OK
Are all clocks operating normally?
NG
OK
Is the streaming I/F?
NG
OK
Is the audio circuit operating normally?
NG
OK
Is the video circuit operating normally?
NG
OK
Is SDRAM I/F operating normally?
NG
OK
Is the microprocessor operating normally?
Repair or replace any defective unit
All checks normal?
NO
YES
Check completed

Check 1: Are all power supply voltages normal?

Reproduce DVD-REF-A1 Title 1.

Verify the voltage of the sensing pin.

If results are not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components.

NO.	Verification location	Rated value	Unit
1	VD8-PGND	8±0.4	V
2	VD33-GND	3.3±0.3	V
3	SRVDD33-GND	3.3±0.3	V
4	VCC5-GND	5±0.25	V
5	AVCC5-GND	5±0.3	V
6	VCC33-GND	3.3±0.15	V
7	VCC18-GND	1.8±0.15	V

Check 2: Are all clocks operating normally?

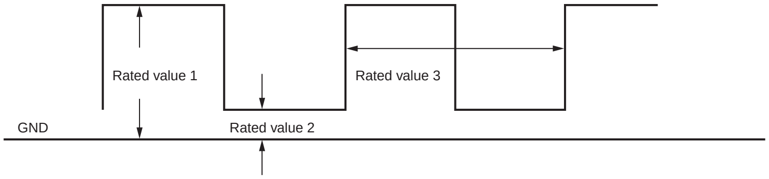
Reproduce DVD-REF-A1 Title 1.

Checks are to be conducted with a GND reference.

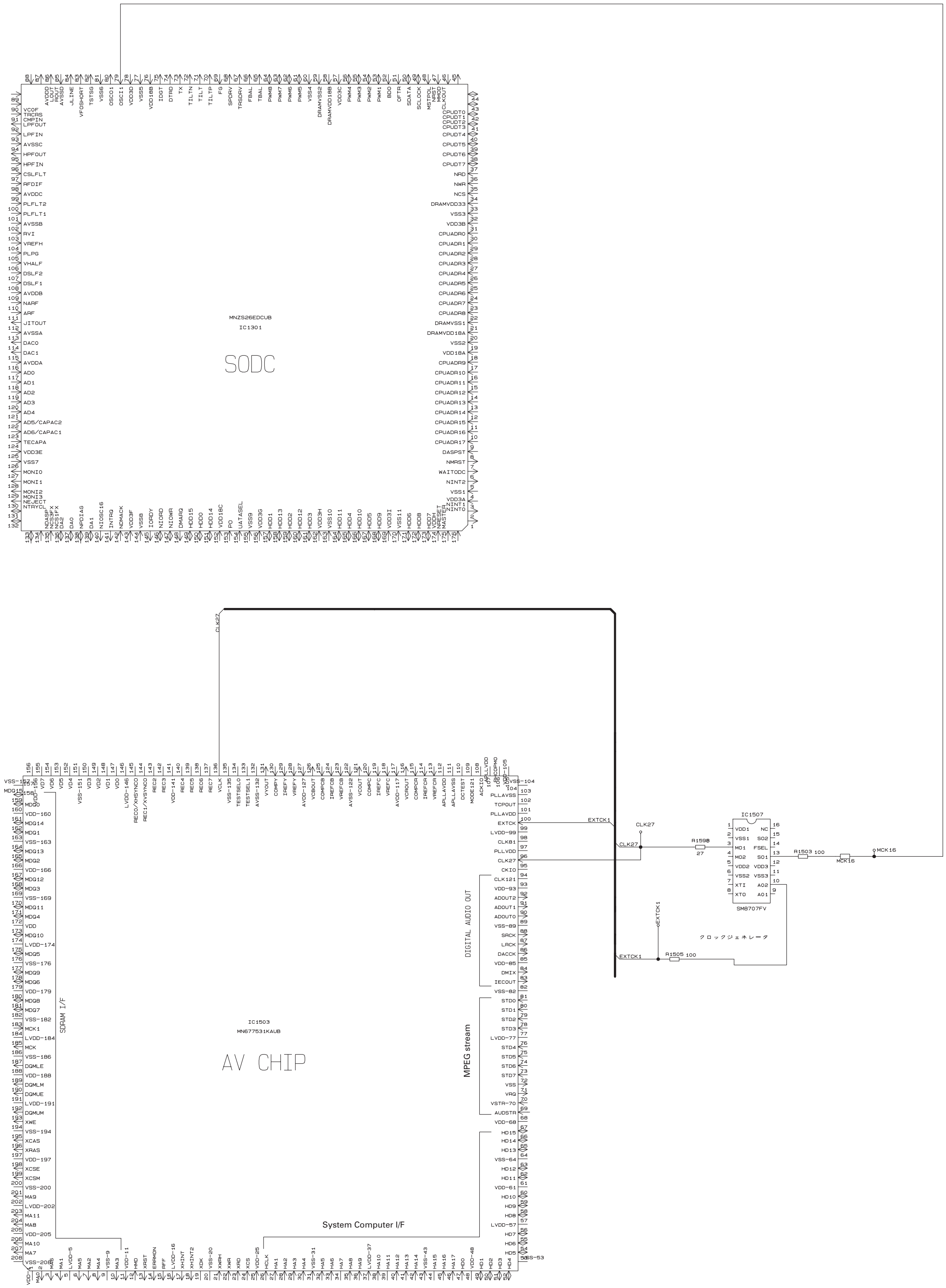
If locations listed under "verification location 2", can be verified, there will be no need to perform verifications for the locations listed under "verification location 1."

If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in the vicinity of IC1507.

NO.	Verification location 1 (contact measurements)	Verification location 2	Media	Rated value1	Rated value 2	Rated value 3
1	CLK27	IC1503 96pin	ALL	2.65V~VCC33	GND~0.65V	27MHz±50ppm
2	EXTCK1	IC1503 100pin	DVD	2.65V~VCC33	GND~0.65V	36.8640MHz±100ppm
3	EXTCK1	IC1503 100pin	CD	2.65V~VCC33	GND~0.65V	33.8688MHz±100ppm
4	MCK16	IC1301 79pin	ALL	2.33~VCC33	GND~0.99V	16.9344MHz±100ppm



Clock rated values



MNZS26EDCUB
IC1301
SODC
IC1503
MN677531KAUB
AV CHIP
SDRAM I/F
DIGITAL AUDIO OUT
MPEG stream
System Computer I/F
CLK27
EXTCK1
IC1507
SM8707FV
R1598
27
R1503 100
R1505 100
MCK16
クロックジェネレータ

Check 3: Is the streaming I/F operating normally?

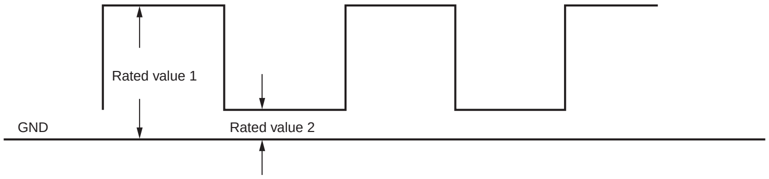
Reproduce DVD-REF-A1 Title 1.

Checks are to be conducted with a GND reference.

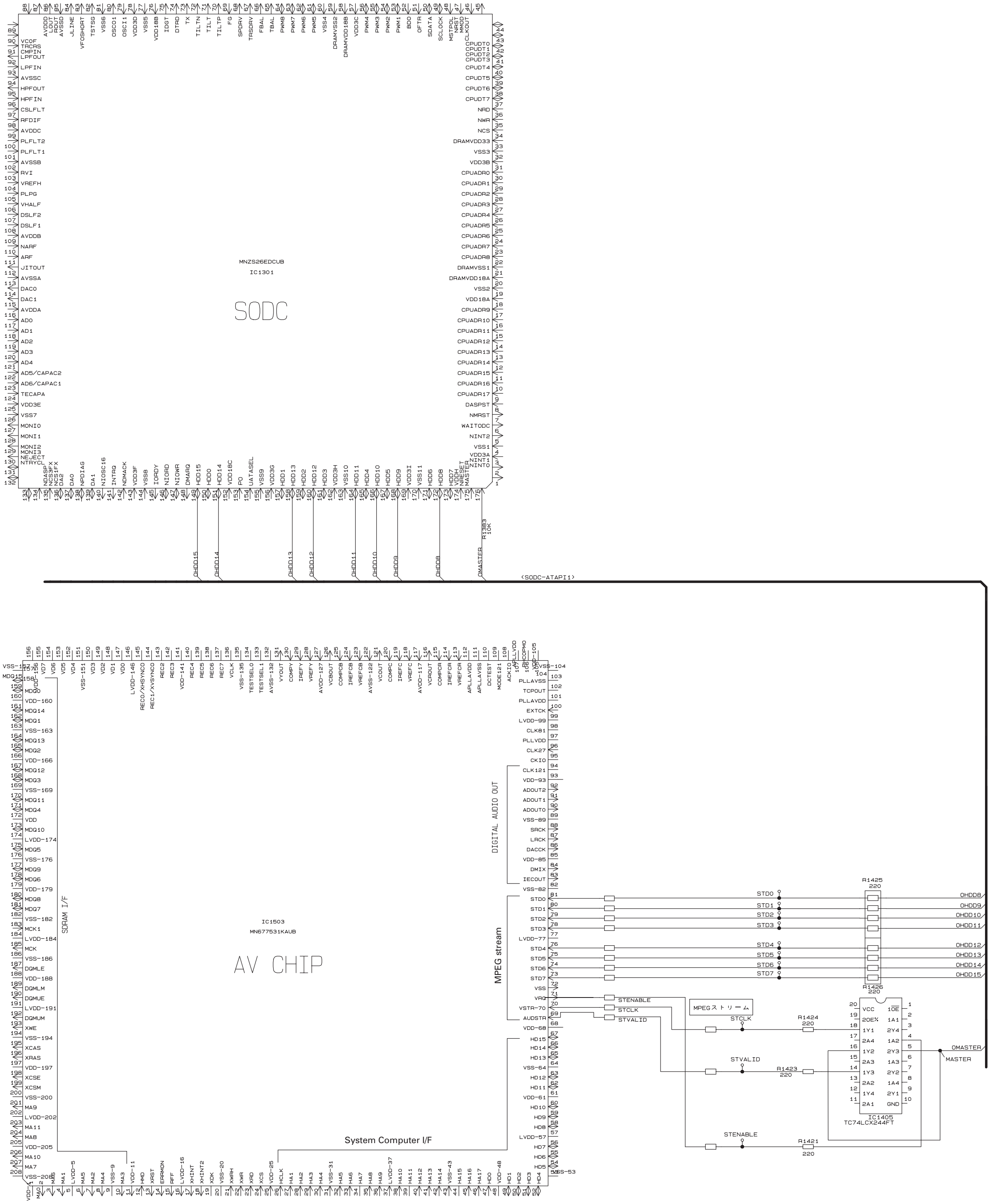
If the locations listed under "verification location 2" can be verified, then there is no need to conduct verifications for the locations listed under "verification location 1."

If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in areas where a problem occurs, for the overall sequence of“output "input"of the checked location.

NO.	Verification location 1 (contact measurements)	Verification location2	Verification Media	Rated value 1	Rated value 2	Reference waveform	Others
1	STD0	IC1503 81pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD8 at R1425
2	STD1	IC1503 80pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD9 at R1425
3	STD2	IC1503 79pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD10 at R1425
4	STD3	IC1503 78pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD11 at R1425
5	STD4	IC1503 76pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD12 at R1426
6	STD5	IC1503 75pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD13 at R1426
7	STD6	IC1503 74pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD14 at R1426
8	STD7	IC1503 73pin	DVD	2V~VCC33	GND~0.8V	Waveform 1	Line name OHDD15 at R1426
9	STCLK	IC1503 70pin	DVD	2V~VCC33	GND~0.8V	Waveform 2	Line name ODA2 at IC1405
10	STVALID	IC1503 69pin	DVD	2V~VCC33	GND~0.8V	Waveform 2	Line name OINTRQ at IC1405
11	MASTER	IC1301 176pin	DVD	2V~VCC33	GND~0.8V	Waveform 2	Line name STENABLE at IC1405



Streaming I/F rated value


MNZS26EDCUB
IC1301
SODC
OHDD15
OHDD14
OHDD13
OHDD12
OHDD11
OHDD10
OHDD9
OHDD8
OMASTER
R1383
10K
<SODC-ATAPI1>
IC1503
MN677531KAUB
AV CHIP
SDRAM I/F
DIGITAL AUDIO OUT
MPEG stream
System Computer I/F
STD0
STD1
STD2
STD3
STD4
STD5
STD6
STD7
R1425
220
R1426
220
OHDD8
OHDD9
OHDD10
OHDD11
OHDD12
OHDD13
OHDD14
OHDD15
STENABLE
STCLK
STVALID
MPEGストリーム
STCLK
R1424
220
STVALID
R1423
220
STENABLE
R1421
220
VCC
1OE
2OE%
1A1
1Y1
2Y4
2A4
1A2
1Y2
2Y3
2A3
1A3
1Y3
2Y2
2A2
1A4
1Y4
2Y1
2A1
GND
IC1405
TC74LCX244FT
OMASTER
MASTER

Check 4: Is the audio circuit operating normally?

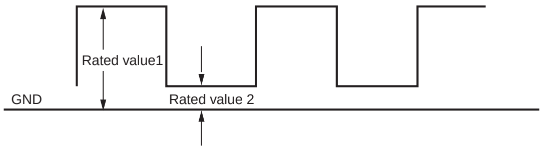
Reproduce DVD-REF-A1 Title 2 Chapter (48V/16-bit/1 kHz/0dB). Verify the circuit described in Figure 2.

Checks are to be conducted using GNDAU1 (sensing pins) as a reference.

If the locations, listed under "verification location 2", can be verified, there is no need to conduct verifications for the locations listed under "verification location 1."

If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in the vicinity of the main components.

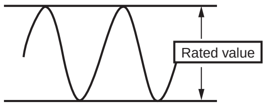
NO.	Verification location 1	Verification location 2	Rated value 1	Rated value 2	Reference waveform
1	AOUT0	IC1503 90pin	2.0V and over	0.8V and lower	Waveform 3
2	SRCK	IC1605 1pin	2.0V and over	0.8V and lower	Waveform 3
3	LRCK	IC1605 3pin	2.0V and over	0.8V and lower	Waveform 3



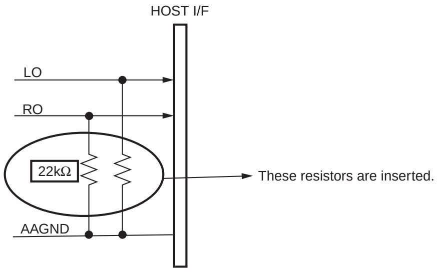
Three serial output rated values

Checks are conducted with the measurement circuit below.

NO.	Verification location 1	Verification location 2	Rated value	Reference waveform
4	LO	CN1611 36pin	1100±150mV	Waveform 4
5	RO	CN1611 34pin	1100±150mV	Waveform 4

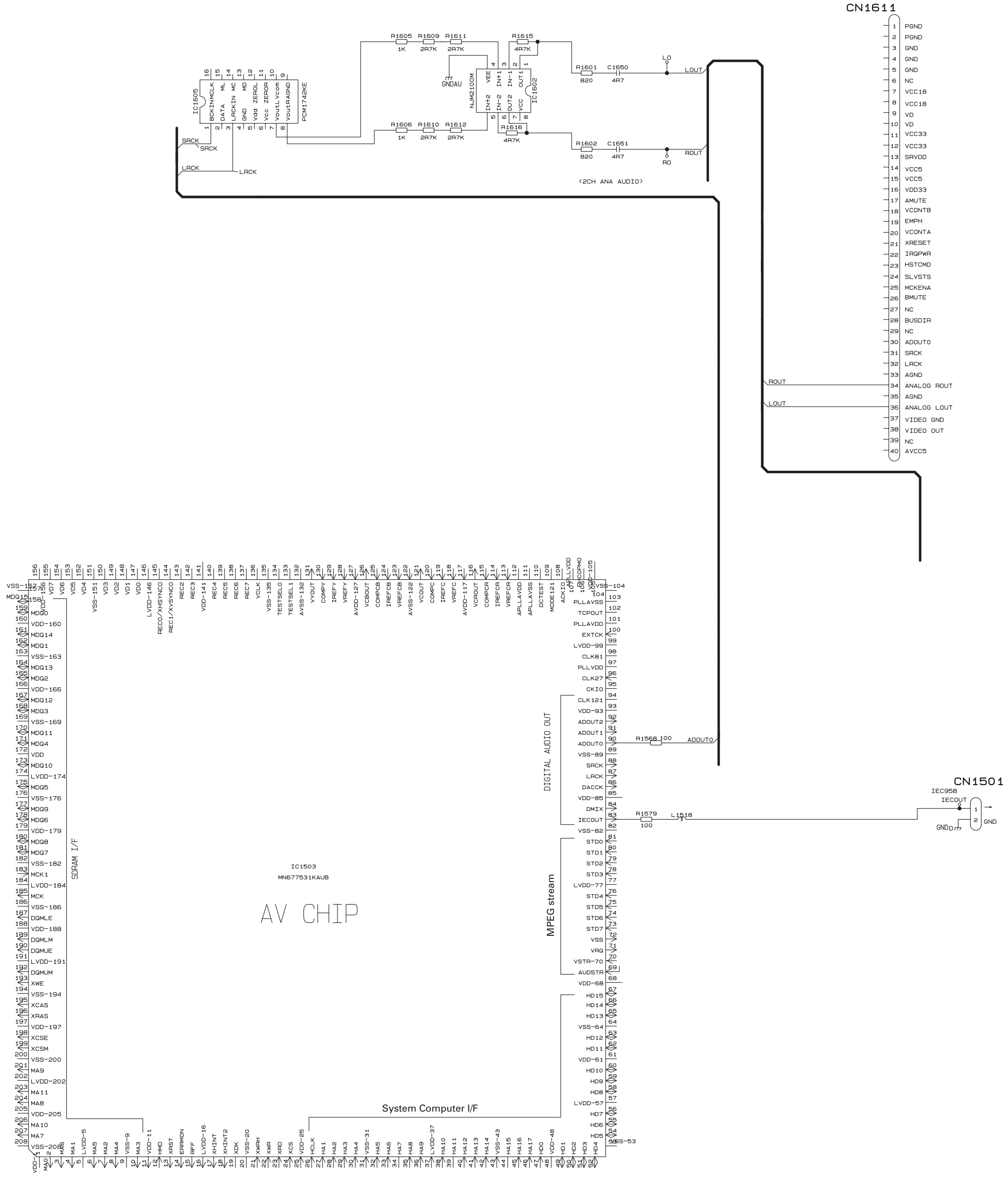


Analog audio outputs (LO and RO) rated values



LO and RO output measurement circuit

NO.	Verification location 1	Verification location 2	Rated value 1	Rated value 2	Reference waveform
6	IECOUT	CN1501 1pin	2.2V and over	0.8V and lower	Waveform 5

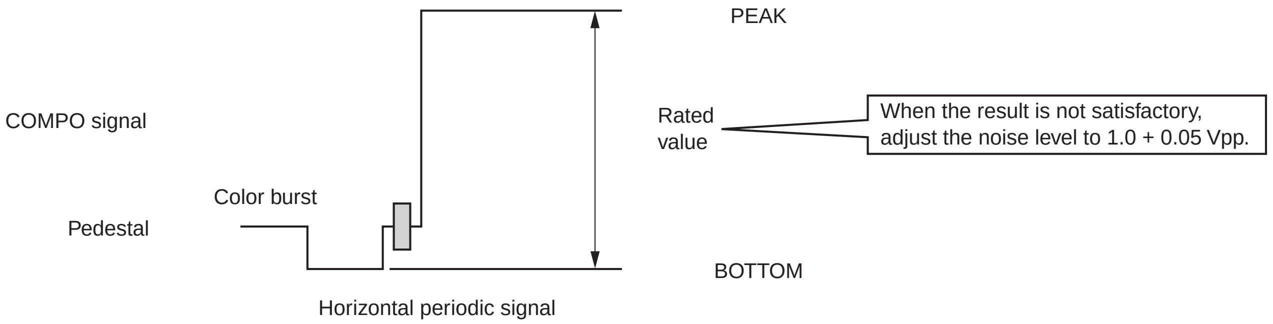

CN1611
1 PGND
2 PGND
3 GND
4 GND
5 GND
6 NC
7 VCC18
8 VCC18
9 VD
10 VD
11 VCC33
12 VCC33
13 SRVDD
14 VCC5
15 VCC5
16 VDD33
17 AMUTE
18 VCONTB
19 EMPH
20 VCONTA
21 XRESET
22 IRQPWR
23 HSTCMD
24 SLVSTS
25 MCKENA
26 BMUTE
27 NC
28 BUSDIR
29 NC
30 ADOUT0
31 SRCK
32 LRCK
33 AGND
34 ANALOG ROUT
35 AGND
36 ANALOG LOUT
37 VIDEO GND
38 VIDEO OUT
39 NC
40 AVCC5
IC1605
PCM1742KE
BCK
DATA
LRCKIN
GND
Vcc
VoutL
VoutR
AGND
Vcom
ZEROR
ZEROL
Vdd
MD
MC
ML
SCKI
IC1602
NJM2100M
VEE
IN+1
IN-1
OUT1
IN+2
IN-2
OUT2
VCC
GNDAU
R1605 1K
R1609 2R7K
R1611 2R7K
R1615 4R7K
R1606 1K
R1610 2R7K
R1612 2R7K
R1616 4R7K
R1601 820
C1650 4R7
R1602 820
C1651 4R7
LO
RO
LOUT
ROUT
SRCK
LRCK
(2CH ANA AUDIO)
IC1503
MN677531KAUB
AV CHIP
SDRAM I/F
DIGITAL AUDIO OUT
MPEG stream
System Computer I/F
ADOUT2
ADOUT1
ADOUT0
IECOUT
R1568 100
ADOUT0
R1579 100
L1518
CN1501
IEC958
IECOUT
GND

Check 5: Is the video circuit operated normally?

Reproduce DVD-REF-A1 Title 2 Chapters (White 100IRE).
Monitor the output with the oscilloscope, by setting the COMPO signal to a GND reference.
Set the Trigger mode to the TV trigger, and the Trigger line to line-150.

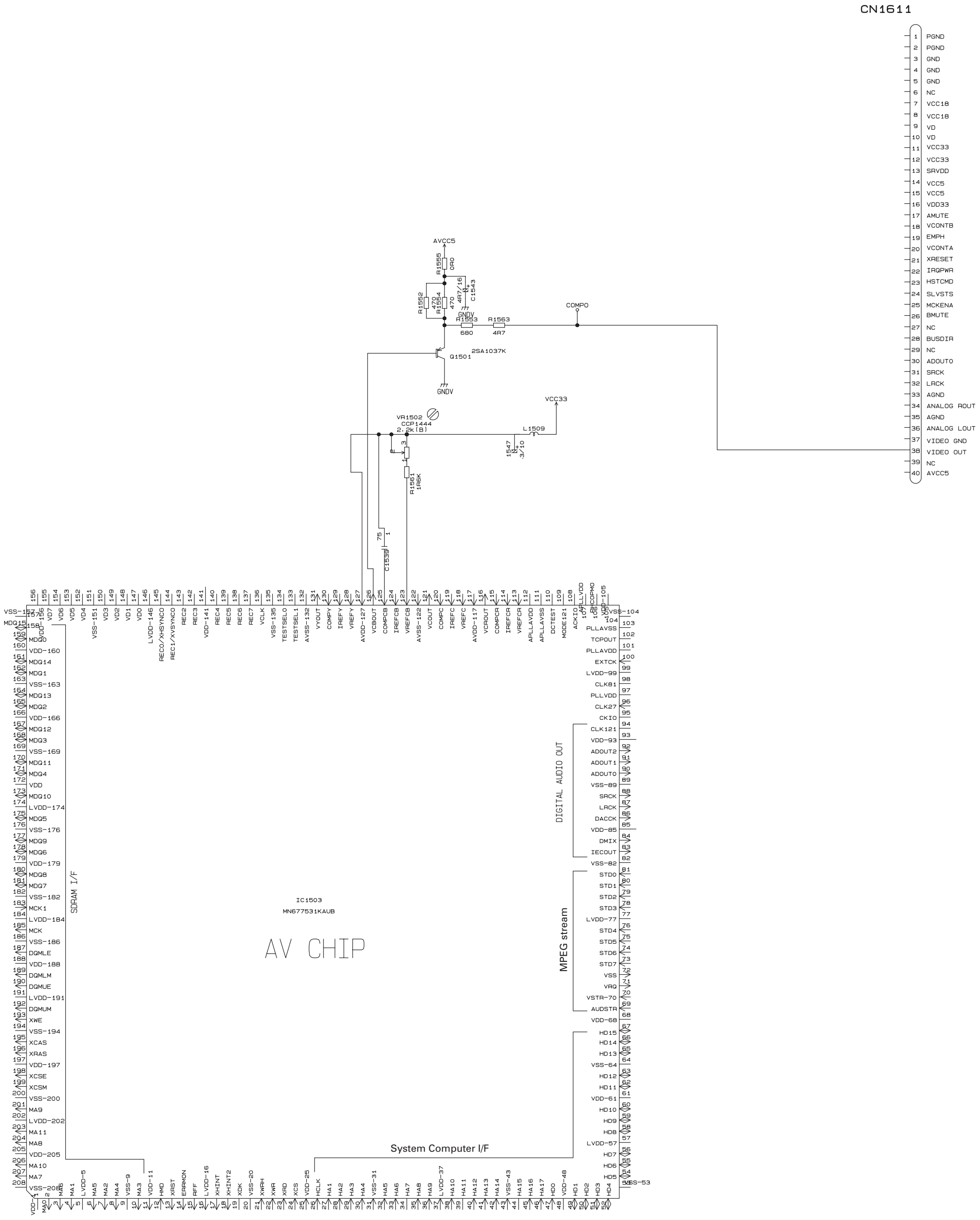
NO.	Verification location (sensing pin)	Rated value	Reference waveform
1	COMPO	1.0±0.05Vpp	Waveform 6

If the result is not satisfactory, check to see if there are any problems with resin flux cored solder, parts and components, in the vicinity of line-150 (the section marked ⑤ in the circuit diagram) and peripheral components.


PEAK
COMPO signal
Rated value
Color burst
Pedestal
BOTTOM
Horizontal periodic signal

When the result is not satisfactory, adjust the noise level to 1.0 + 0.05 Vpp.

Composite signal 100% output waveform


CN1611
1 PGND
2 PGND
3 GND
4 GND
5 GND
6 NC
7 VCC18
8 VCC18
9 VD
10 VD
11 VCC33
12 VCC33
13 SRVDD
14 VCC5
15 VCC5
16 VDD33
17 AMUTE
18 VCONTB
19 EMPH
20 VCONTA
21 XRESET
22 IRQPWR
23 HSTCMD
24 SLVSTS
25 MCKENA
26 BMUTE
27 NC
28 BUSDIR
29 NC
30 ADOUT0
31 SRCK
32 LRCK
33 AGND
34 ANALOG ROUT
35 AGND
36 ANALOG LOUT
37 VIDEO GND
38 VIDEO OUT
39 NC
40 AVCC5
AVCC5
R1555
0R0
R1552
470
R1554
470
4R7/16
C1543
GNDV
R1553
680
R1563
4R7
COMPO
2SA1037K
Q1501
GNDV
VR1502
CCP1444
2.2k(B)
VCC33
L1509
1547
3/10
R1561
1R6K
75
1
C1530
IC1503
MN677531KAUB
AV CHIP
SDRAM I/F
DIGITAL AUDIO OUT
MPEG stream
System Computer I/F
MDQ0
VDD-160
MDQ14
MDQ1
VSS-163
MDQ13
MDQ2
VDD-166
MDQ12
MDQ3
VSS-169
MDQ11
MDQ4
VDD
MDQ10
LVDD-174
MDQ5
VSS-176
MDQ9
MDQ6
VDD-179
MDQ8
MDQ7
VSS-182
MCK1
LVDD-184
MCK
VSS-186
DQMLE
VDD-188
DQMLM
DQMUE
LVDD-191
DQMUM
XWE
VSS-194
XCAS
XRAS
VDD-197
XCSE
XCSM
VSS-200
MA9
LVDD-202
MA11
MA8
VDD-205
MA10
MA7
VSS-208
VSS-104
PLLAVSS
TCPOUT
PLLAVDD
EXTCK
LVDD-99
CLK81
PLLVDD
CLK27
CKIO
CLK121
VDD-93
ADOUT2
ADOUT1
ADOUT0
VSS-89
SRCK
LRCK
DACCK
VDD-85
DMIX
IECOUT
VSS-82
STD0
STD1
STD2
STD3
LVDD-77
STD4
STD5
STD6
STD7
VSS
VRQ
VSTR-70
AUDSTR
VDD-68
HD15
HD14
HD13
VSS-64
HD12
HD11
VDD-61
HD10
HD9
HD8
LVDD-57
HD7
HD6
HD5
VSS-53
VDD7
VD6
VD5
VD4
VSS-151
VD3
VD2
VD1
VD0
LVDD-146
REC0/XHSYNCO
REC1/XVSYNCO
REC2
REC3
VDD-141
REC4
REC5
REC6
REC7
VCLK
VSS-135
TESTSEL0
TESTSEL1
AVSS-132
YVOUT
COMPY
IREFY
VREFY
AVDD-127
VCBOUT
COMPCB
IREFCB
VREFCB
AVSS-122
VCOUT
COMPC
IREFC
VREFC
AVDD-117
VCROUT
COMPCR
IREFCR
VREFCR
APLLAVDD
APLLAVSS
DCTEST
MODE121
ACKIO
MA1
LVDD-5
MA5
MA2
MA4
VSS-9
MA3
VDD-11
HMD
XRST
ERRMON
RFF
LVDD-16
XHINT
XHINT2
XDK
VSS-20
XWRH
XWR
XRD
XCS
VDD-25
HCLK
HA1
HA2
HA3
HA4
VSS-31
HA5
HA6
HA7
HA8
HA9
LVDD-37
HA10
HA11
HA12
HA13
HA14
VSS-43
HA15
HA16
HA17
HD0
VDD-48
HD1
HD2
HD3
HD4

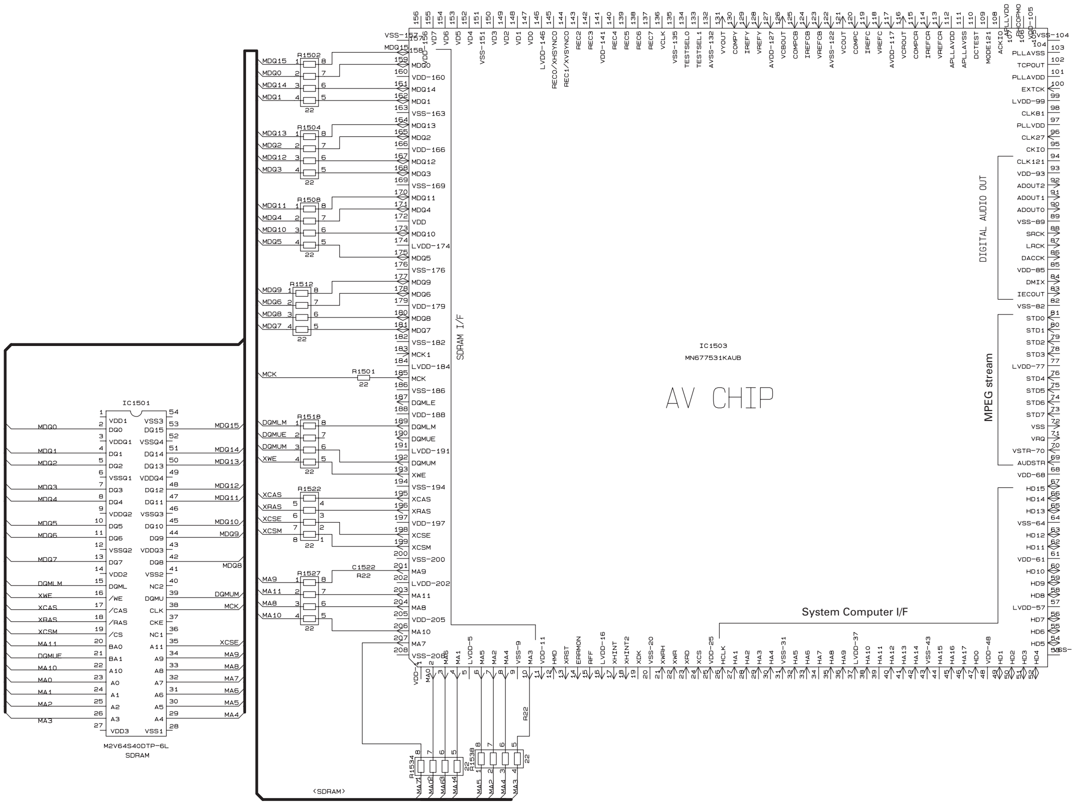
Check 6: Is SDRAM I/F operating normally?

Reproduce DVD-REF-A1 Title 1.

Check the conductivity of both the "Verification location 1" and the "Verification location2."

If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in areas where a problem occurs, for the overall sequence of “output "input" of the checked location.

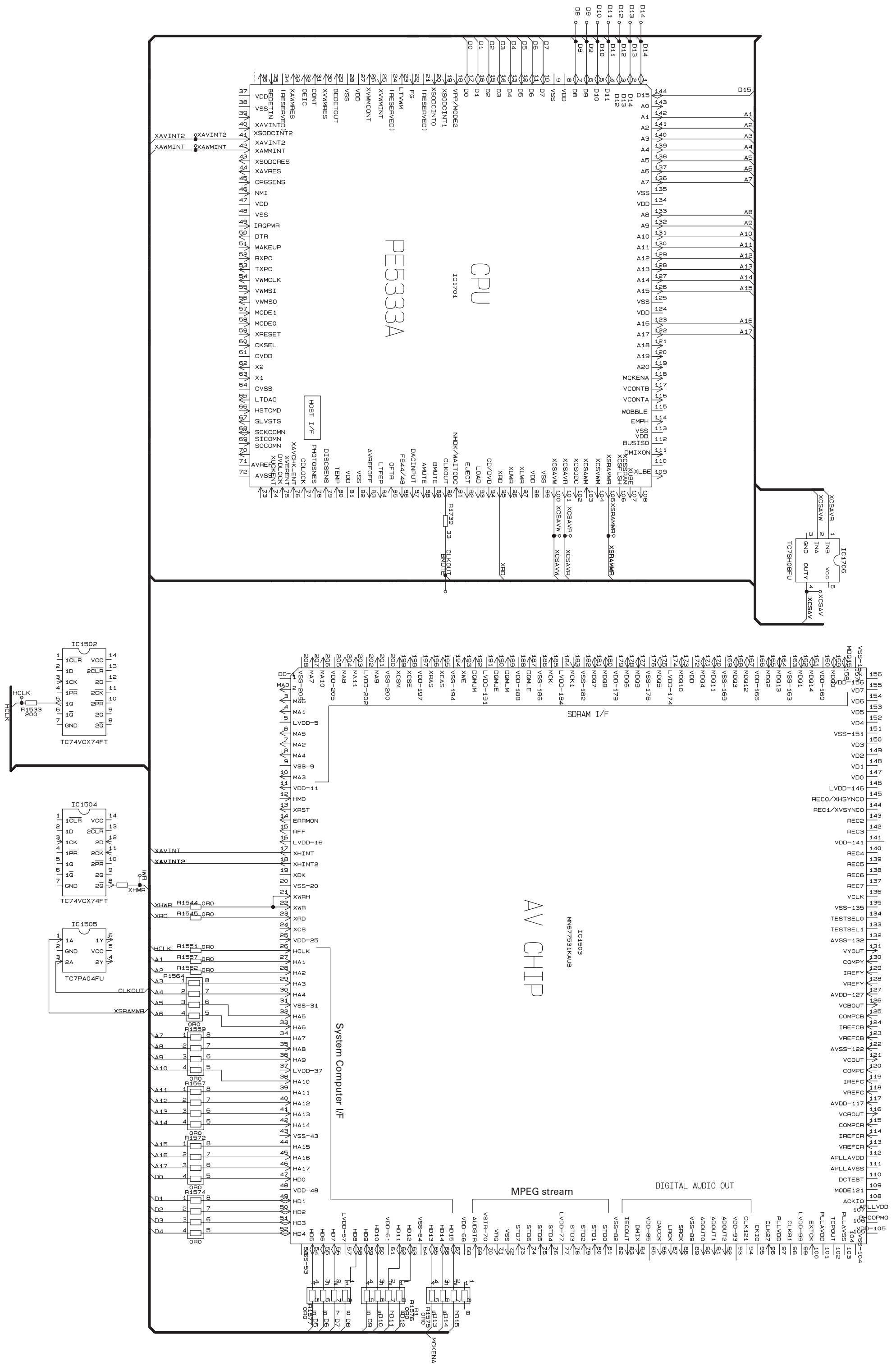
NO.	Signal name	Verification location 1	Verification location 2	Rated value
1	MA0	IC1501 23pin	IC1503 2pin	22Ω ± 5%
2	MA1	IC1501 24pin	IC1503 4pin	22Ω ± 5%
3	MA2	IC1501 25pin	IC1503 7pin	22Ω ± 5%
4	MA3	IC1501 26pin	IC1503 10pin	22Ω ± 5%
5	MA4	IC1501 29pin	IC1503 8pin	22Ω ± 5%
6	MA5	IC1501 30pin	IC1503 6pin	22Ω ± 5%
7	MA6	IC1501 31pin	IC1503 3pin	22Ω ± 5%
8	MA7	IC1501 32pin	IC1503 207pin	22Ω ± 5%
9	MA8	IC1501 33pin	IC1503 204pin	22Ω ± 5%
10	MA9	IC1501 34pin	IC1503 201pin	22Ω ± 5%
11	MA10	IC1501 22pin	IC1503 206pin	22Ω ± 5%
12	MA11	IC1501 20pin	IC1503 203pin	22Ω ± 5%
13	MDQ0	IC1501 2pin	IC1503 159pin	22Ω ± 5%
14	MDQ1	IC1501 4pin	IC1503 162pin	22Ω ± 5%
15	MDQ2	IC1501 5pin	IC1503 165pin	22Ω ± 5%
16	MDQ3	IC1501 7pin	IC1503 168pin	22Ω ± 5%
17	MDQ4	IC1501 8pin	IC1503 171pin	22Ω ± 5%
18	MDQ5	IC1501 10pin	IC1503 175pin	22Ω ± 5%
19	MDQ6	IC1501 11pin	IC1503 178pin	22Ω ± 5%
20	MDQ7	IC1501 13pin	IC1503 181pin	22Ω ± 5%
21	MDQ8	IC1501 42pin	IC1503 180pin	22Ω ± 5%
22	MDQ9	IC1501 44pin	IC1503 177pin	22Ω ± 5%
23	MDQ10	IC1501 45pin	IC1503 173pin	22Ω ± 5%
24	MDQ11	IC1501 47pin	IC1503 170pin	22Ω ± 5%
25	MDQ12	IC1501 48pin	IC1503 167pin	22Ω ± 5%
26	MDQ13	IC1501 50pin	IC1503 164pin	22Ω ± 5%
27	MDQ14	IC1501 51pin	IC1503 161pin	22Ω ± 5%
28	MDQ15	IC1501 53pin	IC1503 158pin	22Ω ± 5%
29	MCK	IC1501 38pin	IC1503 185pin	22Ω ± 5%
30	XWE	IC1501 16pin	IC1503 193pin	22Ω ± 5%
31	XCAS	IC1501 17pin	IC1503 195pin	22Ω ± 5%
32	XRAS	IC1501 18pin	IC1503 196pin	22Ω ± 5%
33	XCSM	IC1501 19pin	IC1503 199pin	22Ω ± 5%
34	XCSE	IC1501 35pin	IC1503 198pin	22Ω ± 5%
35	DQMUM	IC1501 39pin	IC1503 192pin	22Ω ± 5%
36	DQMLM	IC1501 15pin	IC1503 189pin	22Ω ± 5%
37	DQMUE	IC1501 21pin	IC1503 190pin	22Ω ± 5%


IC1501
M2V64S40DTP-6L
SDRAM
IC1503
MN677531KAUB
AV CHIP
SDRAM I/F
DIGITAL AUDIO OUT
MPEG stream
System Computer I/F
<SDRAM>
R1502
R1504
R1508
R1512
R1501
R1518
R1522
R1527
C1522
R22
R1534
R1538
22
MDQ0
MDQ15
MCK
DQMLM
DQMUE
DQMUM
XWE
XCAS
XRAS
XCSE
XCSM
MA0
MA11

Check 7: Is the microprocessor operating normally?

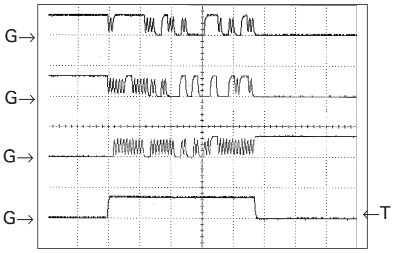
Check the conductivity of both the "Verification location 1" and the "Verification location2."
If the result is not satisfactory, check to see if there are any problems with the resin flux cored solder, parts and components, in areas where a problem occurs, for the overall sequence of "output – input" of the checked location.

NO.	Signal name	Verification location 1	Verification location 2	Verification Media	Rated value	Others
1	A1	IC1701 142pin	IC1503 27pin	ALL	0Ω	
2	A2	IC1701 141pin	IC1503 28pin	ALL	0Ω	
3	A3	IC1701 140pin	IC1503 29pin	ALL	0Ω	
4	A4	IC1701 139pin	IC1503 30pin	ALL	0Ω	
5	A5	IC1701 138pin	IC1503 32pin	ALL	0Ω	
6	A6	IC1701 137pin	IC1503 33pin	ALL	0Ω	
7	A7	IC1701 136pin	IC1503 34pin	ALL	0Ω	
8	A8	IC1701 133pin	IC1503 35pin	ALL	0Ω	
9	A9	IC1701 132pin	IC1503 36pin	ALL	0Ω	
10	A10	IC1701 131pin	IC1503 38pin	ALL	0Ω	
11	A11	IC1701 130pin	IC1503 39pin	ALL	0Ω	
12	A12	IC1701 129pin	IC1503 40pin	ALL	0Ω	
13	A13	IC1701 128pin	IC1503 41pin	ALL	0Ω	
14	A14	IC1701 127pin	IC1503 42pin	ALL	0Ω	
15	A15	IC1701 126pin	IC1503 44pin	ALL	0Ω	
16	A16	IC1701 123pin	IC1503 45pin	ALL	0Ω	
17	A17	IC1701 122pin	IC1503 46pin	ALL	0Ω	
18	D0	IC1701 17pin	IC1503 47pin	ALL	0Ω	
19	D1	IC1701 16pin	IC1503 49pin	ALL	0Ω	
20	D2	IC1701 15pin	IC1503 50pin	ALL	0Ω	
21	D3	IC1701 14pin	IC1503 51pin	ALL	0Ω	
22	D4	IC1701 13pin	IC1503 52pin	ALL	0Ω	
23	D5	IC1701 12pin	IC1503 54pin	ALL	0Ω	
24	D6	IC1701 11pin	IC1503 55pin	ALL	0Ω	
25	D7	IC1701 10pin	IC1503 56pin	ALL	0Ω	
26	D8	IC1701 7pin	IC1503 58pin	ALL	0Ω	
27	D9	IC1701 6pin	IC1503 59pin	ALL	0Ω	
28	D10	IC1701 5pin	IC1503 60pin	ALL	0Ω	
29	D11	IC1701 4pin	IC1503 62pin	ALL	0Ω	
30	D12	IC1701 3pin	IC1503 63pin	ALL	0Ω	
31	D13	IC1701 2pin	IC1503 65pin	ALL	0Ω	
32	D14	IC1701 1pin	IC1503 66pin	ALL	0Ω	
33	D15	IC1701 144pin	IC1503 67pin	ALL	0Ω	
34	XCSAVR	IC1701 101pin	IC1706 1pin	ALL	0Ω	
35	XCSAVW	IC1701 100pin	IC1706 2pin	ALL	0Ω	
36	XCSAV	IC1706 4pin	IC1503 24pin	ALL	0Ω	
37	XAVINT	IC1701 42pin	IC1503 17pin	ALL	0Ω	
38	XAVINT2	IC1701 41pin	IC1503 18pin	ALL	0Ω	
39	XRD	IC1701 95pin	IC1503 23pin	ALL	0Ω	
40	CLKOUT	IC1701 90pin	IC1505 3pin	ALL	33Ω	Dividing circuitFor verification location 2, include also IC1502 pin-3
41	HCLK	IC1502 5pin	IC1503 26pin	ALL	200Ω ± 5 %	
42	XSRAMWR	IC1701 105pin	IC1505 1pin	ALL	0Ω	
43	XHWR	IC1504 8pin	IC1503 21pin	ALL	68Ω ± 5 %	


CPU
IC1701
PE5333A
HOST I/F
AV CHIP
IC1503
MN677531KAUB
SDRAM I/F
System Computer I/F
MPEG stream
DIGITAL AUDIO OUT
IC1502
TC74VCX74FT
IC1504
TC74VCX74FT
IC1505
TC7PA04FU
IC1706
TC7SH08FU
R1533
200
R1739
33
HCLK
XAVINT
XAVINT2
XAWMINT
XHWR
XRD
CLKOUT
XSRAMWR
XCSAV
XCSAVW
XCSAVR
MCKENA
D0–D15
A0–A17

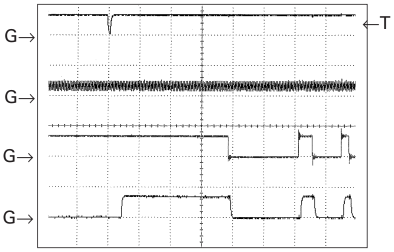
Note:1 The encircled number denote measuring pointes in the circuit diagram.
2 Reference voltage VHALF : 1.65V

⑪ CH1: STD1
⑫ CH2: STD4
⑬ CH3: STD7
⑭ CH4: STENABLE
5V/div. 2µs/div.



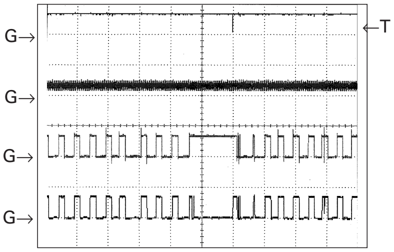
Waveform 1

⑮ CH1: AVRTM
⑯ CH2: STCLK
⑰ CH3: STVALID
⑭ CH4: STENABLE
5V/div. 2µs/div.



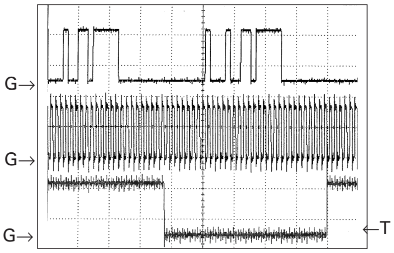
Waveform 2(1)

⑮ CH1: AVRTM
⑯ CH2: STCLK
⑰ CH3: STVALID
⑭ CH4: STENABLE
5V/div. 50µs/div.



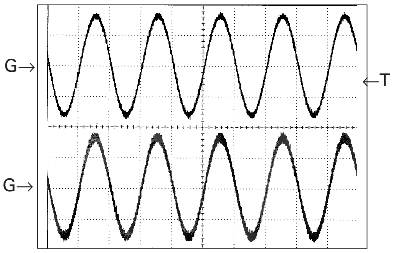
Waveform 2(2)

⑱ CH1: AOUT0
⑲ CH2: SRCKAV
⑳ CH3: LRCKAV
2V/div. 2µs/div.



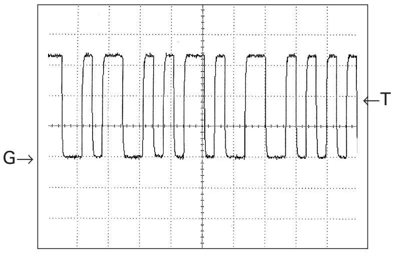
Waveform 3

㉒ CH1: LO
㉓ CH2: RO
1V/div. 500µs/div.



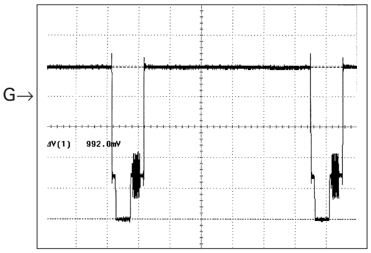
Waveform 4

㉑ CH1: IEC958 1V/div. 500ns/div.



Waveform 5

㉔ CH1: COMPO 200mV/div. 10µs/div.
[White 100% output]

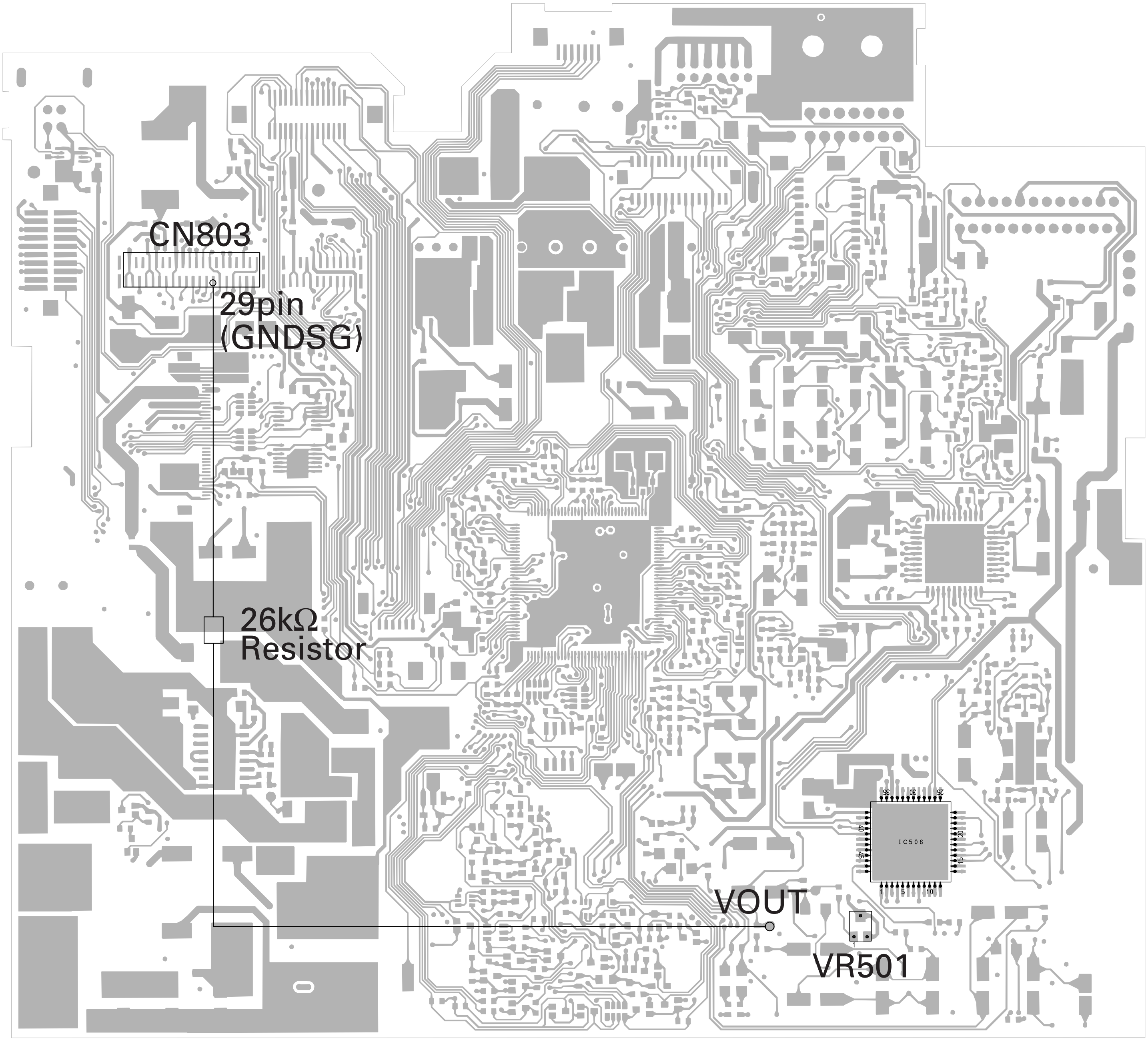


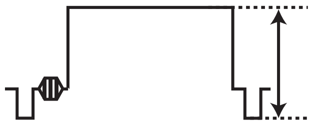
Waveform 6

6.3 MAIN VIDEO LEVEL ADJUSTMENT

● **Adjustment Point**

Mother PCB (Side A)


CN803
29pin
(GNDSG)
26kΩ
Resistor
IC506
VOUT
VR501

Step	Mother PCB adjustment	Mode	Input (input test pin,specs, other conditions)	Output (measuring point, waveform)	Measuring instruments	Specs	Adjusting point
1	Main video level	AV	Input test pin: AUXV ····100 IRE (white 100%), 1.0Vp-p, (input via 75ohms) AUXVG····GND Note : A monitor is the connected state.	Measuring point: VOUT 	Oscilloscope	1.50V ± 0.05Vp-p Measure between the sync tip and 100 IRE (top level).	VR501

(1) The Video level (Vlevel) is out of spec.
When the Vlevel is more than 1.50Vp-p, the images become whitish.
When the Vlevel is less than 1.50Vp-p, the images become blackish.

6.4 MONITOR PCB ADJUSTMENT

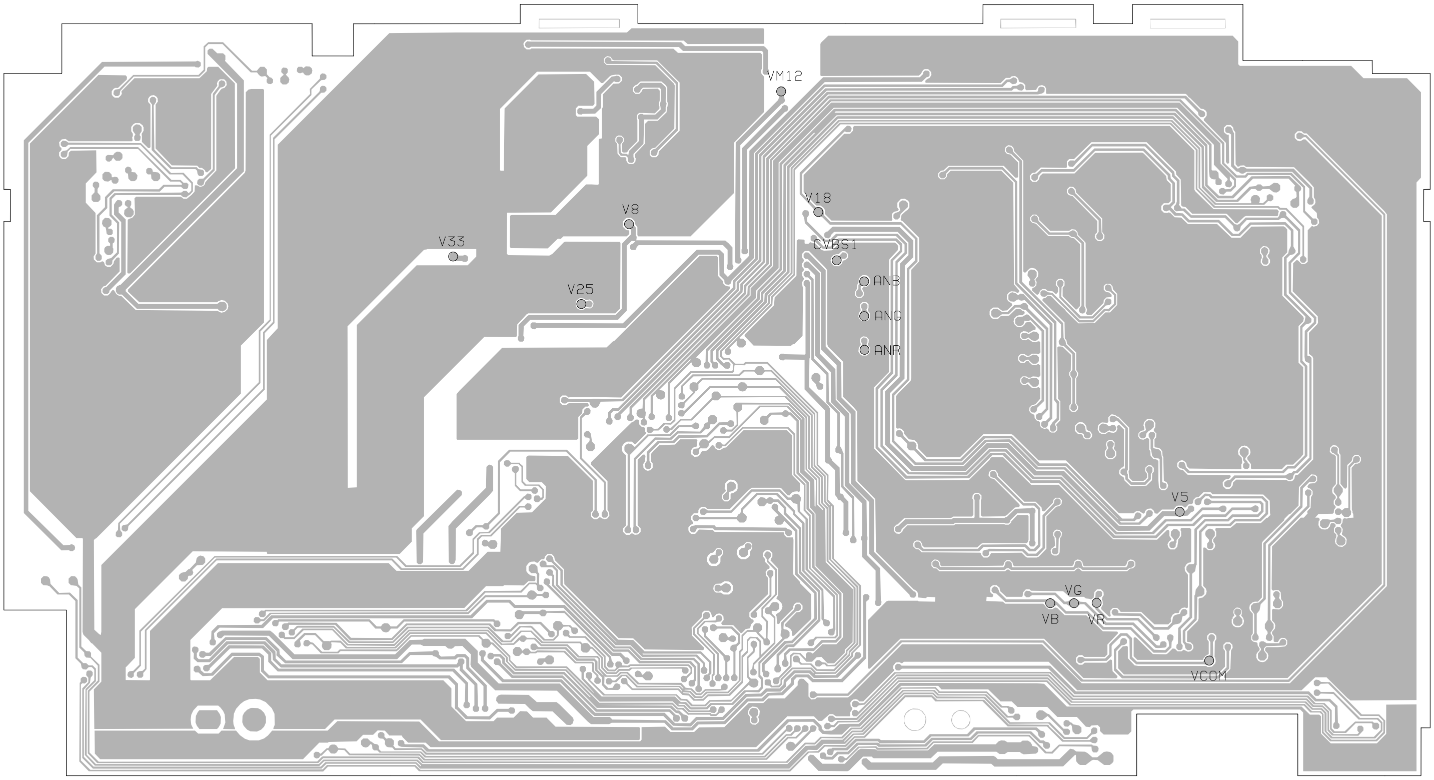
Notes: Flicker adjustment is needed when monitor PCB is exchanged.

● **Test mode starting operation.**

1)The TEST land(EPRTEST) and GND on monitor PCB are made to short-circuit.
2)It shifts to [Flicker adjustment mode] in Power ON.
3)To switch between the adjustment modes, use the MENU button.
  Flicker adjustment mode
  Line adjustment 1 mode
  Line adjustment 2 mode
  Dimmer parameter setting mode
Please set the CONTRAST data in [Line adjustment 1 mode] and [Line adjustment 2 mode] to [88], and used as reference data for other adjustment items.
4)The operation in each mode is as follows.
[↑ ↓] button: Used to select a desired adjustment item in each mode
[← →] button: Used to adjust the selected item

● **Adjustment Point**

Monitor PCB (Side B)

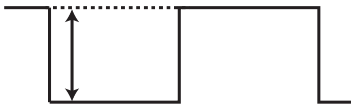
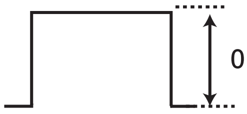
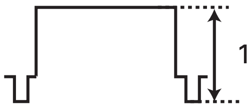
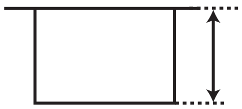
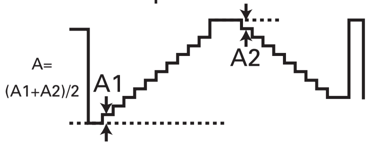
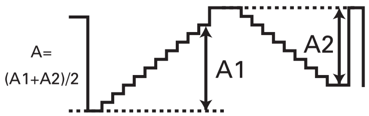


Notes:

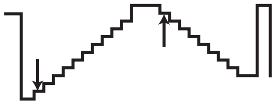
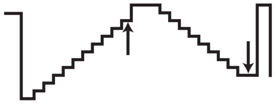
1) When the power supply for TC90A64AF-P (IC4001) is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL). The IIC lines can accept a maximum of 5V.

No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
1	3.3V power supply verification	Apply 14.4V to TP PWRV1 and TP PWRV2.	C4852 hot side (TP V33)	—	V33 = 3.3V ± 0.3V	
2	2.5V power supply verification	Apply 14.4V to TP VVI.	(TP V25)	—	V25 = 2.5V ± 0.2V	
3	5V power supply verification	Apply 14.4V to TP VVI.	(TP V5)	—	V5 = 5.0V ± 0.3V	
4	8V power supply verification	Apply 14.4V to TP VVI.	(TP V8)	—	V8 = 8.0V ± 0.6V	
5	18.5V power supply verification	Apply 14.4V to TP VVI.	(TP V18)	—	V18 = 18.5V ± 0.8V	
6	-12V power supply verification	Apply 14.4V to TP VVI.	(TP VM12)	—	VM12 = -12.0V ± 0.6V	

Notes:
1) When the power supply for TC90A64AF-P is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL). The IIC lines can accept a maximum of 5V.
2) In the following table, SA**h is a sub-address of TC90A64AF-P.

No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
7	Vcom amp output Voltage waveform Verification	Any input signal	TP VCOM	–	4.50 ± 0.20V 	
8	Input waveform verification (RGB)	Apply a white 100% signal toTP AVR,ANG. ANB.	TP ANR,ANG, ANB	–	 0.7V ± 0.02V	The signal generator should be used via 75 ohms. (specs in desinging : 75.0 ± 0.2ohms)
9	Input waveform verification (composite)	Apply a white 100% signal toTP CVBS 1.	TP CVBS 1	–	 1.50 ± 0.04V	The signal generator should be used via75 ohms.
10	RGB amp output voltage waveform verification	Apply a black signal to TP ANR,ANG,ANB. (Video level:0%)	TP VG	–	 3.9 ± 0.2V	The input signal has no setup. (Apply a black signal to TP CV BS1)
11	Gamma 0 Verification	Apply a 10-step signal to TP ANR,ANG,ANB.	TP VG	–	The first-step A = 0.50V ± 0.1V 	The input 10-step signal has no setup.
12	Gamma 2 verification	Apply a 10-step signal to TP ANR,ANG,ANB.	TP VG	–	The 10-step A = 3.10 ± 0.15V 	The input 10-step signal has no setup. If the measured value is out of specs, change the setting ofSA24h D11 - 8 (γ2 inflection point: GAMMA2 in the line adjustment 1 mode) (Register setting specs: 4 + 1)

Notes:
1) When the power supply for TC90A64AF-P is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL). The IIC lines can accept a maximum of 5V.
2) In the following table, SA**h is a sub-address of TC90A64AF-P.

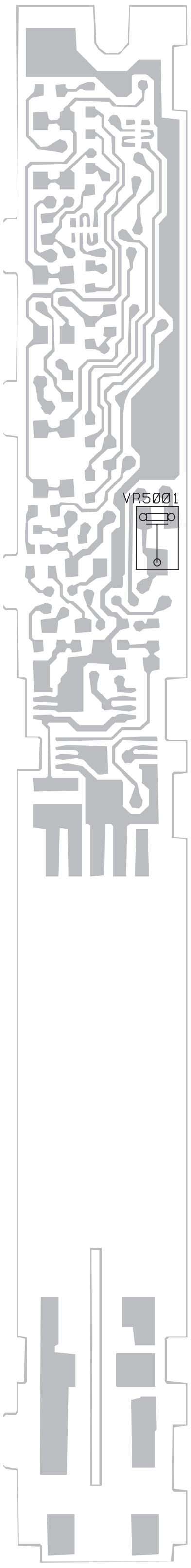
No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
13	B SUB BRIGHT	Apply a 10-step signal to TP ANR,ANG, ANB.	TP VG and VB	Register setting of SA39h D11 - 8	Adjust the first step levels of the G waveform and the B waveform. 	Register setting specs : 8 ± 2 (specs in designing: 8 ± 1) In the Line adjustment 2 mode, SUB BRI B can be used as the adjusting point.
14	B SUB CONTRAST	Apply a 10-step signal to TP ANR,ANG, ANB.	TP VG and VB	Register setting of SA26h D7 - 1	Adjust the 10th step levels of the G waveform and the B waveform. 	Register setting specs: 64 ± 3 (specs in designing: 64 ± 2) In the Line adjustment 2 mode, SUB CON B can be used as the adjusting point.
15	R SUB BRIGHT	Apply a 10-step signal to TP ANR,ANG, ANB.	TP VG and VR	Register setting of SA39h D15 - 12	Adjust the first step levels of the G wave form and the R waveform.	Register setting specs: 8 ± 2 (specs in designing: 8 ± 1) In the Line adjustment 2 mode, SUB BRI R can be used as the adjusting point.
16	R SUB CONTRAST	Apply a 10-step signal to TP ANR,ANG, ANB.	TP VG and VR	Register setting of SA26h D15 - 9	Adjust the 10th step levels of the G waveform and the R waveform.	Register setting specs: 64 ± 3 (specs in designing: 64 ± 2) In the Line adjustment 2 mode, SUB CON R can be used as the adjusting point.
17	Horizon dot position	Any input signal	—	Register setting of SA22h D3 - 0	7(0111)	After being written in,the setting value of EEP-ROM is checked. 2 mode,DOT CLK can be used as the adjusting point.
18	Aging	Any input signal	—	—	Keep the unit in the operation mode for 30 minutes or longer.	
19	Flicker	Input a signal for alternate white and black lines to TP ANR, TP ANG and TP ANB.	Screen	Register setting of SA22h D15 - 8	Adjust so that the flickers become minimum in all	If it input a signal for alternate white into TP CVBS1, it is possible. (However, adjustment by RGB has priority.) The luminance level of the input signal: 50%. In the flicker adjustment mode, COM DC can be used as the adjusting point.

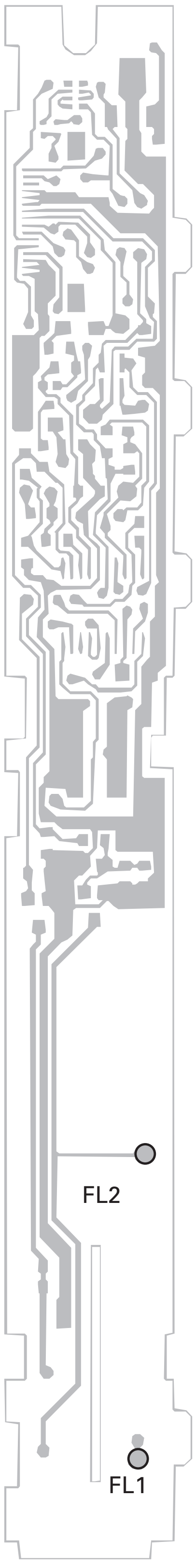
Flicker adjustment has been deviated The images flicker.

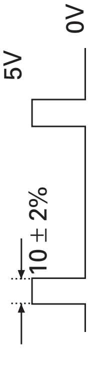
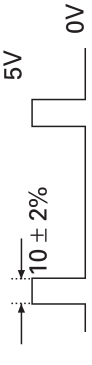
6.5 INVERTER PCB ADJUSTMENT

● Adjustment Point

Inverter PCB (Side A)



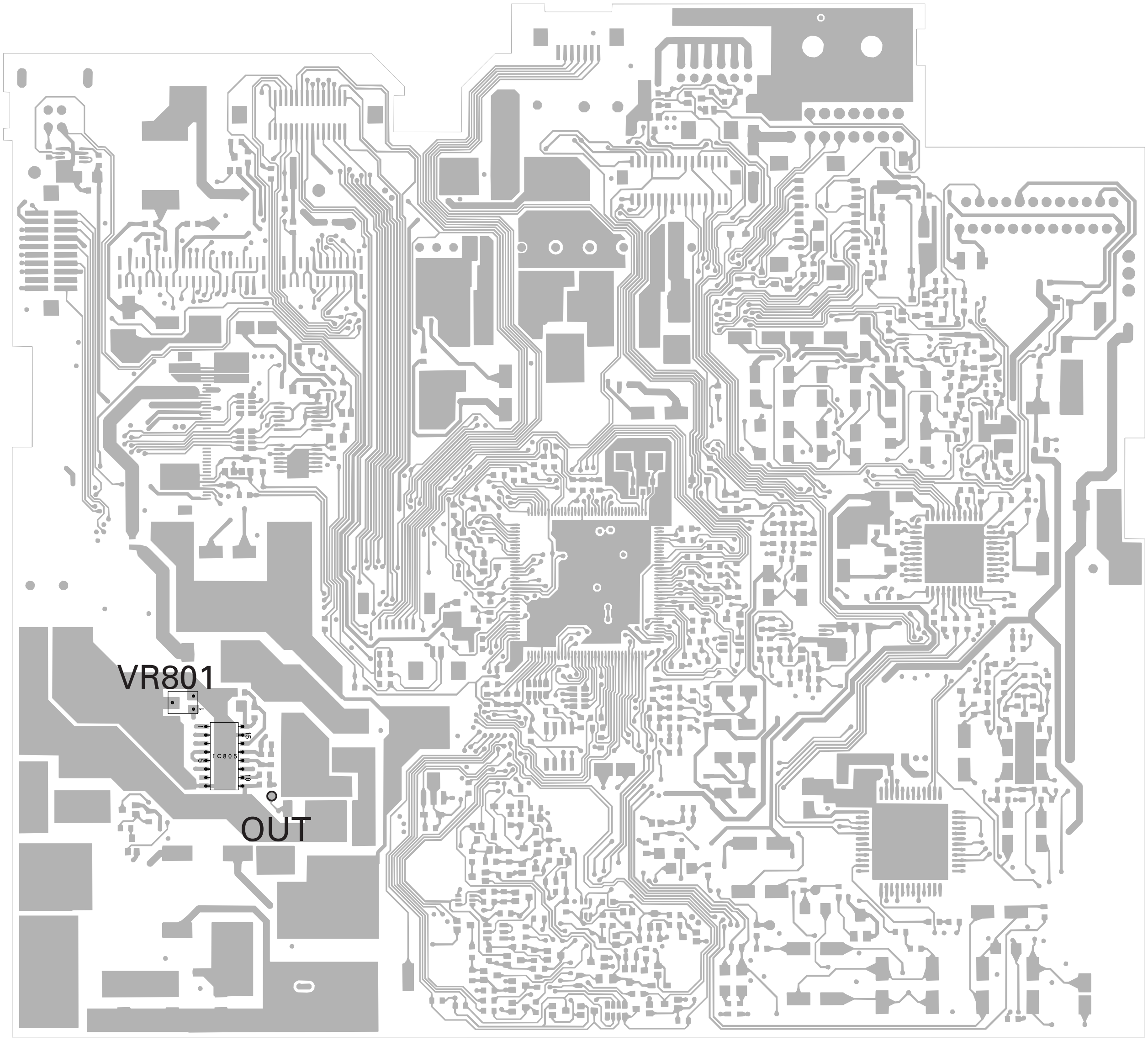


No	Adjustment item	Input signal	Measuring point	Adjusting point	Measuring method and specs.	Remarks
1	BACK LIGHT DRIVE FREQUENCY	Apply 14.4V ± 0.2V to TP VPPFL1 Apply 5.0V to TP DIMDTY TP GNDFL1 and TP INVPUL : GND	TP:FL1,FL2	VR 5001	48.0 ± 0.1kHz	100k ohms is connected between TP FL1 and TP FL2. It acts as the monitor of the waveform after potential. Don't acts as the monitor of the TP FL2 directly. (there is a possibility that a measuring instrument may be destroyed, for high voltage.) Out of spec., when frequency change of following may become impossible.
2	FREQUENCY CHANGE CHECK	Apply wave of 98.0V ± 1kHz to TP INVPUL 	TP:FL1,FL2		49.0 ± 0.5kHz	It checks that the waveform after potential is set to 49 kHz
3	FREQUENCY CHANGE CHECK	Apply wave of 104.0V ± 1kHz to TP INVPUL 	TP:FL1,FL2		52.0 ± 0.5kHz	It checks that the waveform after potential is set to 52 kHz

6.6 MOTHER PCB ADJUSTMENT

● Adjustment Point

MotherPCB (Side A)



Adjustment item	Condition	Adjustment point	Measuring method and specs.	Measuring point
DC-DC converter oscillation frequency	DVD play	VR 801	370KHz±KHz	TP : OUT or Gate of Q822(When it is hard to read a value according to the kind of counter,resistance is added between VD2 and GND.)

6.7 MONITOR TEST MODE

●EEPROM setting mode

[Operations]
To enter the setting mode, while keeping the EPRTEST terminal(probe land EPRTSTA) at "Low", turn reset the monitor micro computer. To switch between the adjustment modes, click the joystick.

Flicker adjustment mode
Line adjustment 1 mode
Line adjustment 2 mode
Dimmer parameter setting mode

[↑ ↓] button: Used to select a desired adjustment item in each mode
[←→] button: Used to adjust the selected item

Notes:
1) The setting values are written in the EEPROM,and then the read-out data is displayed on the screen. WRITE and READ operations are processed by the block data of 16 bits. The total bits for the settings depend on adjusting items.
2) For CS (Check Sum) items, when the settings are changed, the CS value is written in 8 bits by applying the exclusive OR (XOR). The CS value is first written in the EEPROM, and then the read-out data is displayed. If the written data is different from the read-out data, the letter color for the read-out data is changed.

● Memory items and addresses on the EEPROM(S-93C46BR01-J8T1)

Memory array	EEPROM address	Bit15	Bit14	Bit13	Bit12	Bit11	Bit10	Bit9	Bit8	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Bank 1	00H	Dimmer external light threshold (high)								Dimmer external light threshold (low)							
	01H	Backlight output (upper limit)								Backlight output (lower limit)							
	02H	Common reverse output center (COM DC)								Don'tcare		Common reserve output amplitude (COM AMP) PIP SA:22h[B7-2]					
	03H	Don'tcare		Output clamp DC (RGB BIAS) PIP SA:23h[B13-8]						Don'tcare				γ0 inflection point (GAMMA 0) PIP SA:23h[B3-0]			
	04H	γ3 inflection point (GAMMA 3) PIP SA:24h[B15-12]				γ2 inflection point (GAMMA 2) PIP SA:24h[B11-8]				Don'tcare			γ1 inflection point (GAMMA 1) PIP SA:24h[B7-3]				
	05H	Don'tcare	Output sub contrast R (SUB CON R) PIP SA:26h[B15-9]							Don'tcare	Output sub contrast B (SUB CON B) PIP SA:26h[B7-1]						
	06H	Sub brightness R after γ circuit (SUB BRI R) PIP SA:39h[B15-12]				Sub brightness B after g circuit (SUB BRI B) PIP SA:39h[B11-8]				Don'tcare							
	07H	Don'tcare								Don'tcare				Clock phase adjustment (DOT CLK) PIP SA:2Ah[B3-0]			
	08H	Don'tcare								Don'tcare						Sharpness (SHARPNESS) PIP SA:05h[B2-1]	
	09H	Touch panel X coordinates 1								Touch panel Y coordinates 1							
	0AH	Touch panel X coordinates 2								Touch panel Y coordinates 2							
	0BH	Touch panel X coordinates 3								Touch panel Y coordinates 3							
	0CH	Touch panel X coordinates 4								Touch panel Y coordinates 4							
	0DH	Touch panel X coordinates 5								Touch panel Y coordinates 5							
	0EH	Touch panel X coordinates 6								Touch panel Y coordinates 6							
	0FH	Touch panel X coordinates 7								Touch panel Y coordinates 7							
	10H	Touch panel X coordinates 8								Touch panel Y coordinates 8							
	11H	Touch panel X coordinates 9								Touch panel Y coordinates 9							
	12H	Touch panel X coordinates 10								Touch panel Y coordinates 10							
	13H	Touch panel X coordinates 11								Touch panel Y coordinates 11							
	14H	Touch panel X coordinates 12								Touch panel Y coordinates 12							
	15H	Touch panel X coordinates 13								Touch panel Y coordinates 13							
	16H	Touch panel X coordinates 14								Touch panel Y coordinates 14							
	17H	Touch panel X coordinates 15								Touch panel Y coordinates 15							
	18H	Touch panel X coordinates 16								Touch panel Y coordinates 16							
	19H	Touch panel X coordinates 17 (Not used)								Touch panel Y coordinates 17 (Not used)							
	1AH	Outer most Xmin								Outer most Ymin							
	1BH	Outer most Xmax								Outer most Ymax							
	1CH	Check sum address															
	1DH	Don'tcare								Common reverse output center(Reference)							
	1EH	Don'tcare												Clock phase adjustment initial value			
	1FH	Don'tcare															

Memory array	EEPROM address	Bit15	Bit14	Bit13	Bit12	Bit11	Bit10	Bit9	Bit8	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Bank 2	20H	External light of dimmer adjustment(H)								Back light of dimmer adjustment(H)							
	21H	External light of dimmer adjustment(M)								Back light of dimmer adjustment(M)							
	22H	External light of dimmer adjustment(L)								Back light of dimmer adjustment(L)							
	23H-3FH	Don'tcare															

● EEPROM initial value

Item	Meaning	initial value(DEC)	initial value(hex)
COM_DC	Common reverse output center	140	8C
COM_AMP	Common reverse output amplitude	30	1E
RGB_BIAS	Out clamp DC	00	00
GAMMA0	γ0	02	02
GAMMA3	γ3	04	04
GAMMA2	γ2	04	04
GAMMA1	γ1	19	13
SUB_CON_R	Output sub contrast R	64	40
SUB_CON_B	Output sub contrast B	64	40
SUB_BRI_R	Sub brightness R after γ circuit	08	08
SUB_BRI_B	Sub brightness B after γ circuit	08	08
DOT_CLK	Clock phase adjustment	07	07
SHARPNESS	Sharpness	03	03
BL_MAX	Back light output (Max.)	196	C4
BL_MIN	Back light output (Min.)	91	5B
REF_HIGH	Dimmer (H)	160	A0
REF_LOW	Dimmer (L)	96	60
LUM_HIGH	External light (H)	226	E2
LUM_MID	External light (M)	135	87
LUM_LOW	External light (L)	82	52
BL_HIGH	Back light (H)	196	C4
BL_MID	Back light (M)	196	C4
BL_LOW	Back light (L)	104	68

Touch panel initial value(Before a calibration)

TOUCH_X01-TOUCH_X17	Touch panel compensation (X)	00	00
TOUCH_Y01-TOUCH_Y17	Touch panel compensation (Y)	00	00
GAISYU_MIN_X	Outermost X (Min.)	52	34
GAISYU_MAX_X	Outermost X (Max.)	255	FF
GAISYU_MIN_Y	Outermost Y (Min.)	70	46
GAISYU_MAX_Y	Outermost Y (Max.)	245	F5

[Displays in each mode]
In the following figures, the letters and numbers surrounded by a large square are for OSD examples.
On the screen, the adjustment names and the settings (or written data) are listed.
The settings (or written data) will change when some adjustments are made in each mode.
(The following examples show the maximum values.)

(1) Flicker adjustment mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Common reverse output center	[0 - 255]	COM DC	140		

Notes: The CONTRAST data is [88], and used as refference data for other adjustment items.

(2) Line adjustment 1 mode

Adjustment item	Adjustment item	Adjustable range	Settings or written data (DEC)		
Bright (SA22: B7-2)	[0 - 63]	BRIGHT	30		LINE1
Contrast (SA25: B7-1)	[0 - 127]	CONTRAST	88		
Common reverse output center	[0-255]	COM DC	140		
Common reverse output amplitude	[0-63]	COM AMP	30		
Output clamp DC	[0-63]	RGB BIAS	0		
γ0 inflection point	[0-15]	GAMMA0	2		
γ3 inflection point	[0-15]	GAMMA3	4		
γ2 inflection point	[0-15]	GAMMA2	4		
γ1 inflection point	[0-31]	GAMMA1	19		
				CS	AFC3

Notes:
1) CONTRAST data
The CONTRAST data is adjustable, and used as reference data for other adjustment items, which is not memorized in the EEPROM.
2) BRIGHT and COM AMP data
The BRIGHT and COM AMP adjustments are made by using the same 2-screen IC register (SA22h B7-2: common reverse output amplitude).
Therefore, adjusting one of the data will change the other one.

Notes: The CONTRAST data is [88], and used as refference data for other adjustment items,

(3) Line adjustment 2 mode

Adjustment item	Adjustment range	Adjustable name	Settings or written data (DEC)		
Bright (SA22: B7-2)	[0 - 63]	BRIGHT	30		LINE2
Contrast (SA25: B7-1)	[0 - 127]	CONTRAST	88		
Output sub contrast R	[0 - 127]	SUB CON R	64		
Output sub contrast B	[0 - 127]	SUB CON B	64		
Sub brightness R after γ circuit	[0 - 15]	SUB BRI R	8		
Sub brightness B after γ circuit	[0 - 15]	SUB BRI B	8		
Clock phase adjustment	[0 - 15]	DOT CLK	7		
Sharpness	[0 - 3]	SHARPNESS			
				CS	AFC3

Notes:

1) CONTRAST data

The CONTRAST data is adjustable, and used as reference data for other adjustment items, which is not memorized in the EEPROM.

2) SUB BRI R and SUB BRI B data

The displayed value or EEPROM written data is different from the setting value for the 2-screen IC register (TC90A64AF : IC1).

(Before displayed on the screen, the setting value is converted via some software.)

Displayed value (adjusting value) (DEC)	E2PROM written value. (DEC)	2-screen IC register setting (BIN)	
15	15	0111	(MAX)
14	14	0110	
・ ・	・ ・	・ ・	
9	9	0001	
8	8	0000	(TIP)
7	7	1111	
・ ・	・ ・	・ ・	
1	1	1001	
0	0	1000	(MIN)

(4) Dimmer parameter setting mode

Adjustment item	Adjustment item	Adjustable range	Settings or written data (DEC)		
Backlight output (MAX)	[0 - 255]	BL MAX	196		DIMMER
Backlight output(MIN)	[0 - 255]	BL MIN	91		
Dimmer threshold (high)	[0 - 255]	REF H	160		
Dimmer threshold (low)	[0 - 255]	REF L	96		
External light point (high)	[0 - 255]	LUM H	226		
External light point (middle)	[0 - 255]	LUM M	135		
External light point (low)	[0 - 255]	LUM L	82		
Backlight point (high)	[0 - 255]	BL H	196		
Backlight point (middle)	[0 - 255]	BL M	196		
Backlight point (low)	[0 - 255]	BL L	104	CS	AFC3

Note: The dimmer point data is memorized in the EEPROM, but not treated as a CS item.
It's because the settings are adjustable by the user.

6.8 DOT CLOCK ADJUSTMENT

● Dot Clock Adjustment Mode

[Operations]

· [Dot Clock adjustment mode] starting procedure
Reset start while pressing the [ATT] and [SOURCE] Keys together.
· [Dot Clock adjustment mode] cancellation Monitor's microcomputer OFF.
· The operation after this should use remote control.
· [↓↑] button : Used to select a desired adjustment item in each mode.
· [←→] button : Used to adjust the selected item.

[EEPROM : S-93C46BR01-J8T1]

The setting values are written in the EEPROM,and then the read-out data is displayed on the screen.
WRITE and READ operations are processed by the block data of 16 bits.

[Display]

In the following figures,a large square are for OSD examples.

Dot Clock adjustment mode

Adjustment item	Adjustment range	Display	Setting or written data (DEC)		
Clock phase adjustment	[0-15]	DOT CLK	15		
''(initial)	[0-15]	[FACTORY	3	]	
Common reverse output center	[0-255]	COM DC	255		
Common reverse output center adjustment	[0-255]	[FACTORY	140	]	
initial					

* CS(Check Sum)display is not performed.

6.9 TOUCH PANEL CALIBLATION

1. Touch panel calibration

1.1 To enter the touch panel calibration mode
While pressing the ATT and BACK keys on the main unit, reset and start the unit.
1.2 Adjustment outline
1) Touch panel effective range check
2) Touch panel 16-point calibration
The touch panel calibration consists of the above two checks.
When finishing the above checks, exit from the calibration mode by turning off the ACC.

1.3 Adjustment screen menu
Top menu
1) Setup TP effective range
The effective range (outer limit) of the touch panel is obtained.
2) Setup calibration
By touching the 16 points on the screen (excluding the last one for finalization), whole screen calibration will be performed.
* Pressing any screen points far from the (+) marks will not allow you to proceed to the next (+) point.
* To stop the calibration, press the BAND/ESC key.
3) Touch-panel test (only for factory test)
For each (+) mark, the OSD coordinates, AD values, and coordinates before and after correction are displayed.
4) Calibration test (only for factory test)
For touched points, coordinates before and after correction are displayed.

```
  0123456789012345678901234567890
 +-------------------------------+
0|   ###Calibration/TP-TEST###    |0
1|                               |1
2|      1.Setup TP effective range|2
3|      2.Setup calibration       |3
4|      3.Touch-panel test        |4
5|      4.Calibration test        |5
6|                               |6
7| [ENTER]        Menu selection  |7
8| [UP/DOWN]      Cursor movement |8
9| [ACC OFF]      End of test     |9
 +-------------------------------+
```

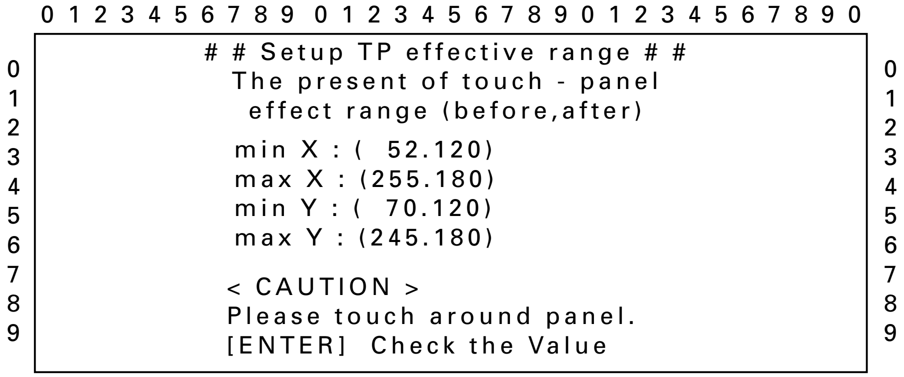
1.4 Cautions on adjustment
1) Be sure to perform the touch panel effective range check (1.Setup TP effective range) first, and then the touch panel 16-point calibration (2. Setup calibration). If the TP effective range check is done again after the TP 16-point calibration, you need to perform the 16-point calibration again.
2) At the TP effective range check, never use a pointed thing like nails to trace the edge of the screen. Use a round-headed thing (R1 or more) and push the screen softly to prevent the screen from being damaged.

1.5 Detailed adjustment procedures
On the main unit or the remote control, use the UP/DOWN keys to select the check item (1) or (2) from the menu, and then press the ENTER key.
When finishing both checks, turn off the ACC to exit from the calibration mode.

(1) Setup TP effective range

The checking data for the edge of the TP screen is memorized in the EEPROM.

[Display]

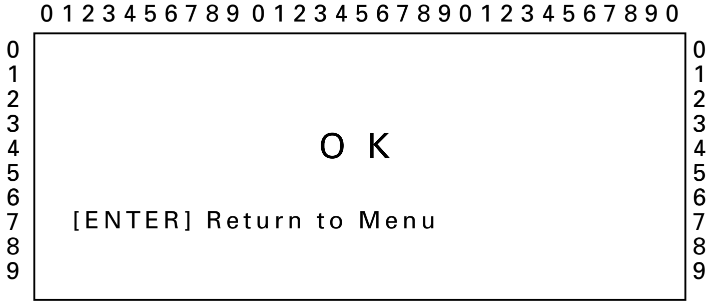


```
## Setup TP effective range ##
 The present of touch - panel
  effect range (before,after)
 min X : ( 52.120)
 max X : (255.180)
 min Y : ( 70.120)
 max Y : (245.180)
< CAUTION >
Please touch around panel.
[ENTER]  Check the Value
```

* The range (before) is the data that has been stored in the EEPROM before calibration.

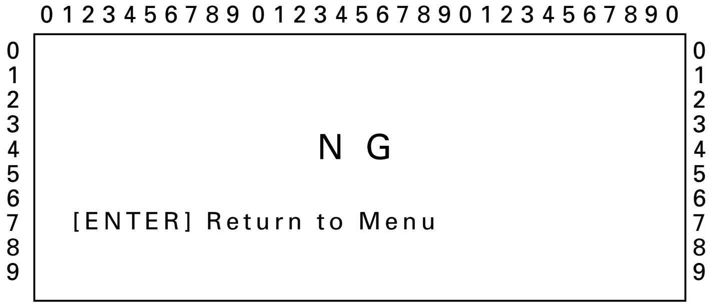
* The range (after) is the data that will be stored after calibration. (Default: min 120, max 180)

Checking result - OK



```
O K
[ENTER] Return to Menu
```

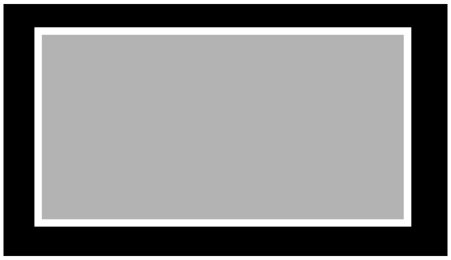
Checking result - NG



```
N G
[ENTER] Return to Menu
```

[Adjustment steps]

1) Trace the edge of the screen along the monitor resin frame with a round-headed thing (R1 or more) to obtain the coordinates (as shown by a white line in the right figure).



* The black frame is the outer resin frame of the monitor.

Caution:

Never use a pointed thing like nails when tracing the edge of the screen. Use a round-headed thing (R1 or more) and push the screen softly to prevent the screen from being damaged

2) Press the ENTER key on the main unit or remote control.

If the checking result is within the allowable range, "OK" will be displayed in the center of the screen. If not, "NG" will be displayed.

* When the checking result exceeds the default values by 10% or more, "NG" is displayed on the screen.

3) To return to the top menu, press the ENTER key on the main unit or remote control.

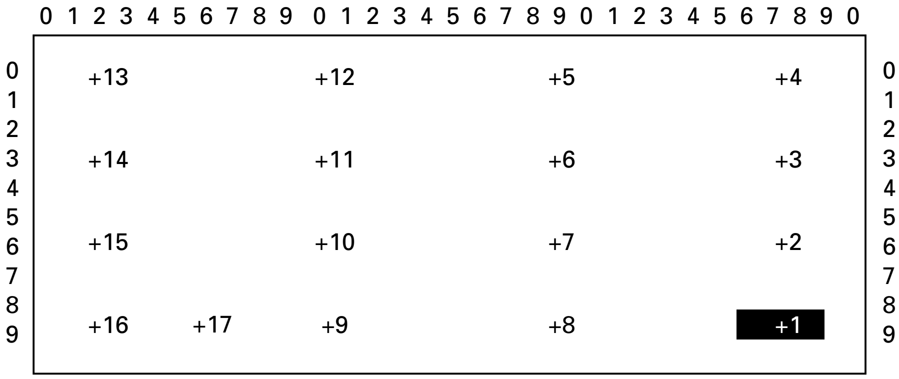
Default data list

Coordinates	Min.	Max.
X	52	255
Y	70	245

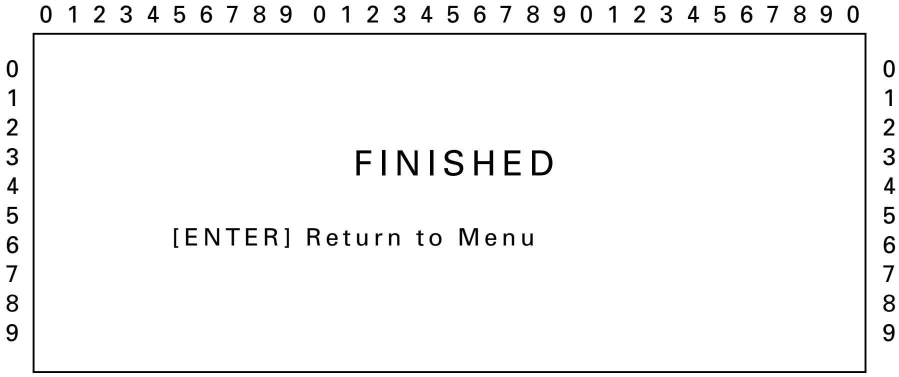
(2) Setup calibration

By touching the (+) marks on the screen one by one, their calibration results are memorized in the EEPROM.

[Display]


0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0
0 1 2 3 4 5 6 7 8 9
+13
+12
+5
+4
+14
+11
+6
+3
+15
+10
+7
+2
+16
+17
+9
+8
+1

* Pressing any screen points far from the (+) marks is ignored.


0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0
0 1 2 3 4 5 6 7 8 9

FINISHED

[ENTER] Return to Menu

* In the above figure, the numbers after (+) (from 1 to 17) shows the order where the cursor moves.
* When the 17th (+) mark is pressed, "FINISHED" will be displayed.

[Adjustment steps]

1) Push the 16 (+) marks one by one by following the cursor's movement. (The plus marks appear in turn on the screen. When you push one properly, the next mark will be displayed.)

2) Lastly, push the 17th (+) mark. "FINISHED" will be displayed in the center of the screen.

3) To return to the top menu, press the ENTER key on the main unit or remote control.
* If you press the BAND/ESC key during adjustment, the screen mode will return to the top menu without any adjustment results stored.

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 DISASSEMBLY

● **Removing the Grille Assy (Fig.1)**

1 Remove the two screws and then remove the Holder.
Disconnect the connector.

2 Remove the two screws and then remove the Grille Assy.

● **Removing the Case**

3 Remove the five screws.(Fig.1)

4 Remove the two screws and then remove the Case.(Fig.1)

Note) Inside the product there is a flexible substrate that connects the Case and the Bracket.
Be very careful and do not give it a strong pull when removing the Case, otherwise it may be torn.

5 Remove the four screws. (Fig.2)

Disconnect the connector and then remove the Bracket. (Fig.2)
Remove the Case.(Fig.1)

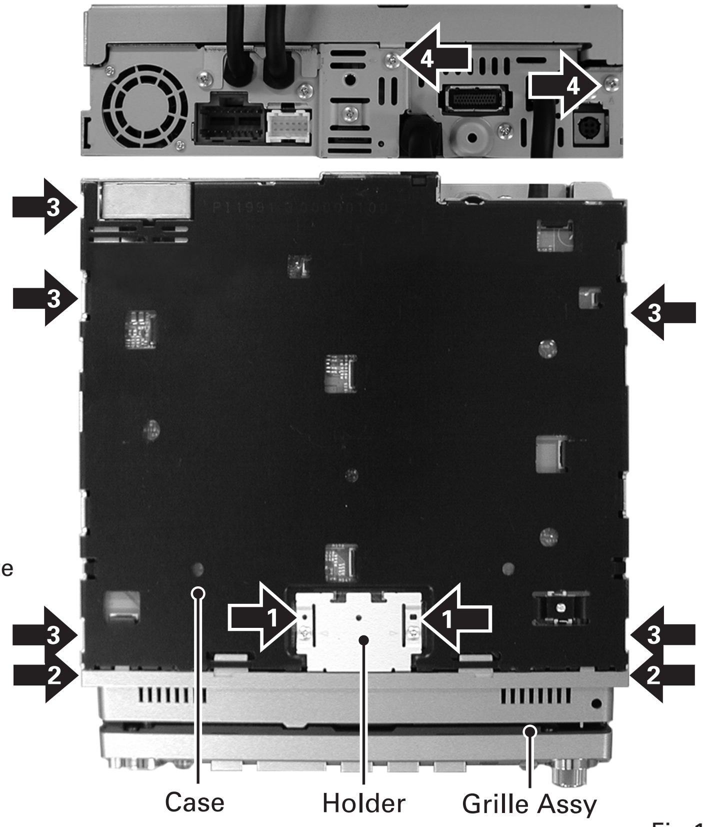


Fig.1

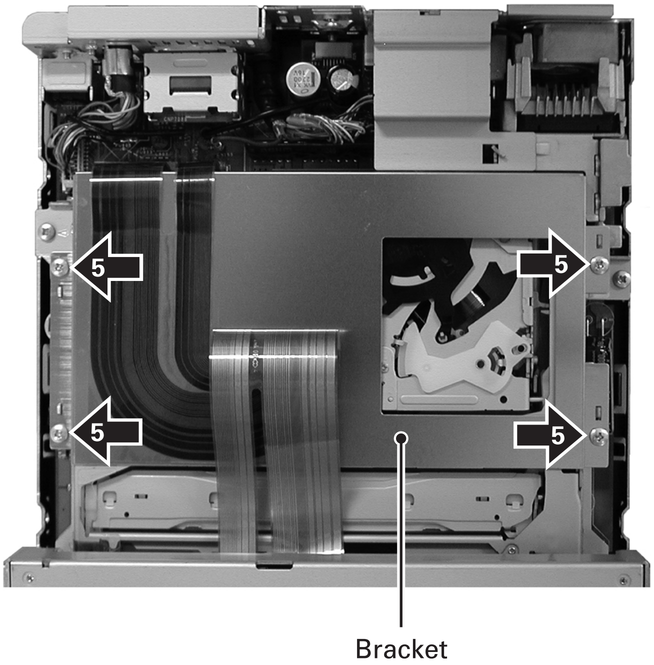


Fig.2

● Removing the DVD Mechanism Module (Fig.3)

1 Remove the four screws.

Disconnect the connector and then remove the DVD Mechanism Module.

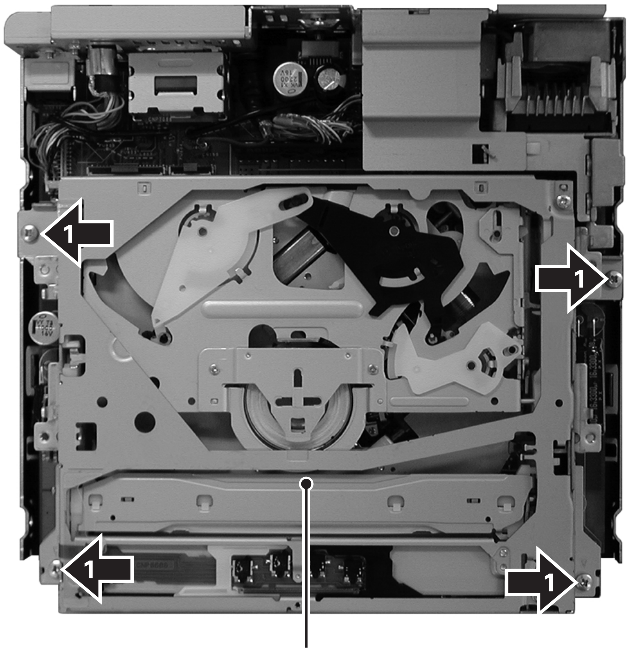

1
1
1
1
DVD Mechanism Module

Fig.3

● Removing the Tuner Unit (Fig.4)

1 Straighten the tab at location indicated.

2 Remove the screw and then remove the Holder.

3 Remove the two screws.

4 Remove the five screws and then remove the Bracket.

5 Straighten the tabs at six locations indicated.

6 Remove the screw and then remove the Tuner Unit

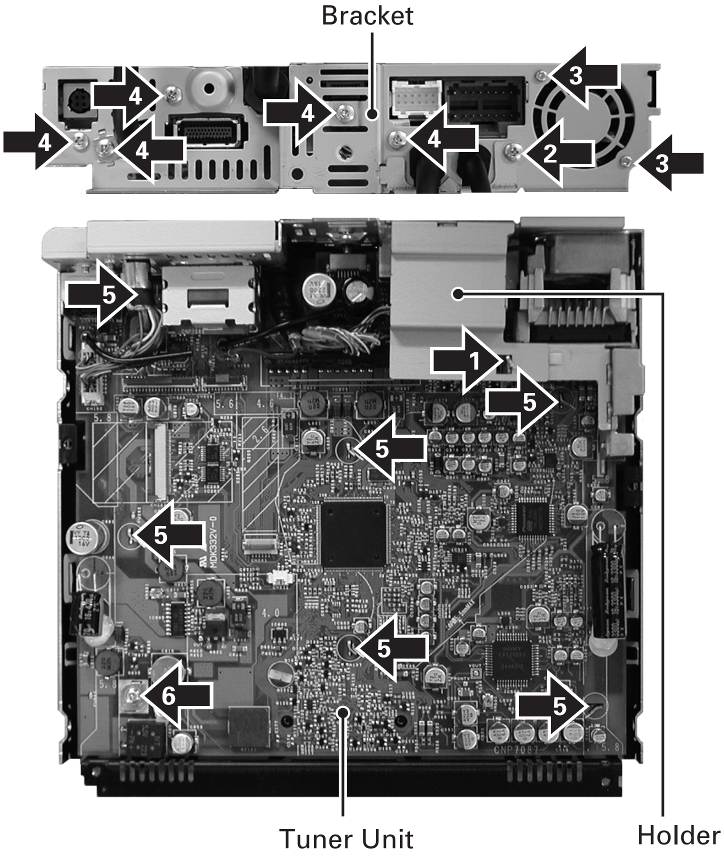

Bracket
4
4
4
4
4
3
2
3
5
1
5
5
5
5
5
6
Tuner Unit
Holder

Fig.4

● Removing the Case (Fig.5)

1 Remove the two screws and then remove the Holder.

2 Remove the screw.

3 Remove the five screws and then remove the Case.

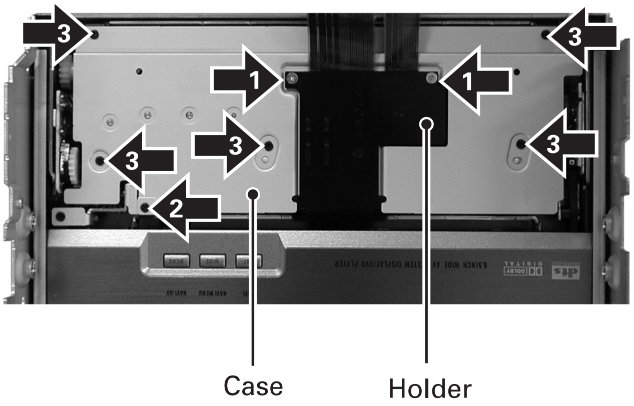

3
3
1
1
3
3
3
2
Case
Holder

Fig.5

● Removing the Display Assy (Fig.6)

1 Remove the screw.

Disconnect the connector and then remove the Motor Unit.

2 Remove the two screws and then remove the two Holders.

3 Pull out the Display Assy in the arrow indicated direction.

Note) When reassembling, hold the switch down with tweezers or the like and put the Display Assy back to the Chassis. Otherwise, the switch may be damaged and not function properly.

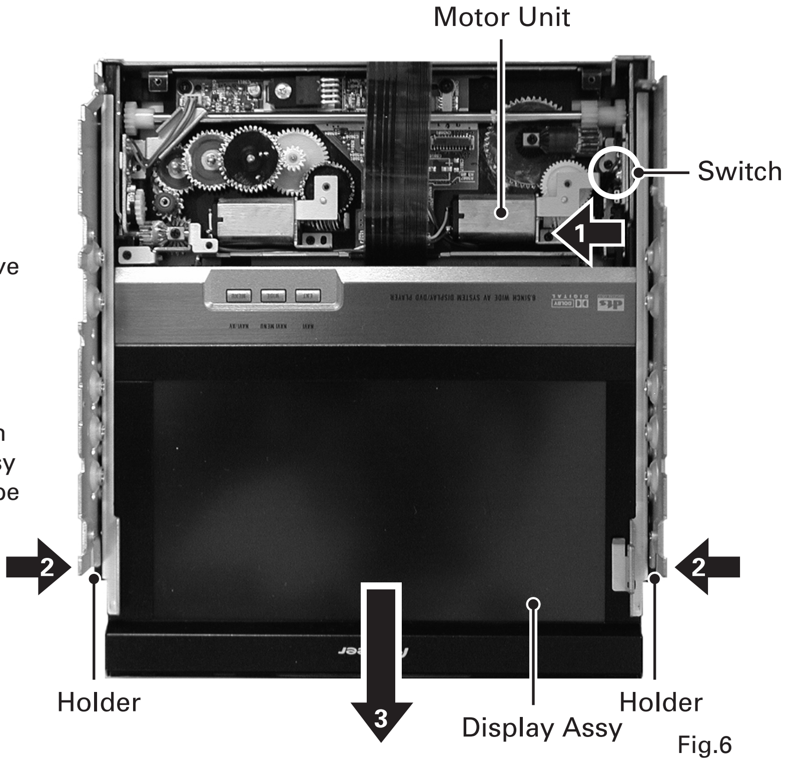

Motor Unit
Switch
1
2
2
Holder
3
Display Assy
Holder

Fig.6

● Removing the Main Unit (Fig.7)

1 Remove the screw and then remove the Bracket.

2 Remove the four screws and then remove the Shaft Unit.

3 Remove the three screws.

Disconnect the connector and then remove the Main Unit.

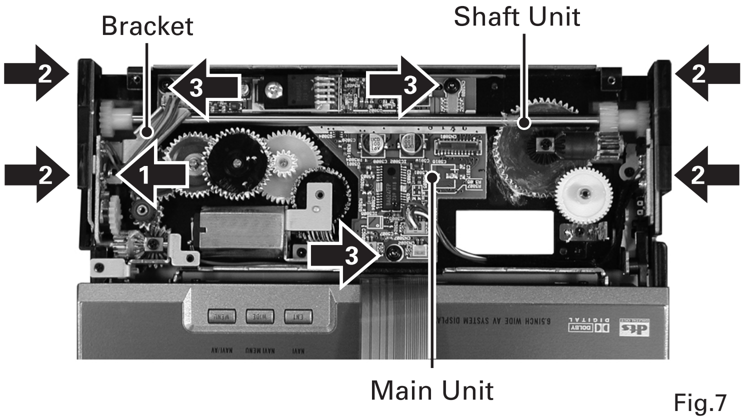

Bracket
Shaft Unit
2
3
3
2
2
1
2
3
Main Unit

Fig.7

● Removing the Display Assy (Fig.8)

1. Remove the two screws and then remove the Holder.
2. Remove the three screws.
3. Remove the two screws and then remove the Cover Unit.
4. Remove the four screws.

Disconnect the connector and then remove the Display Assy.

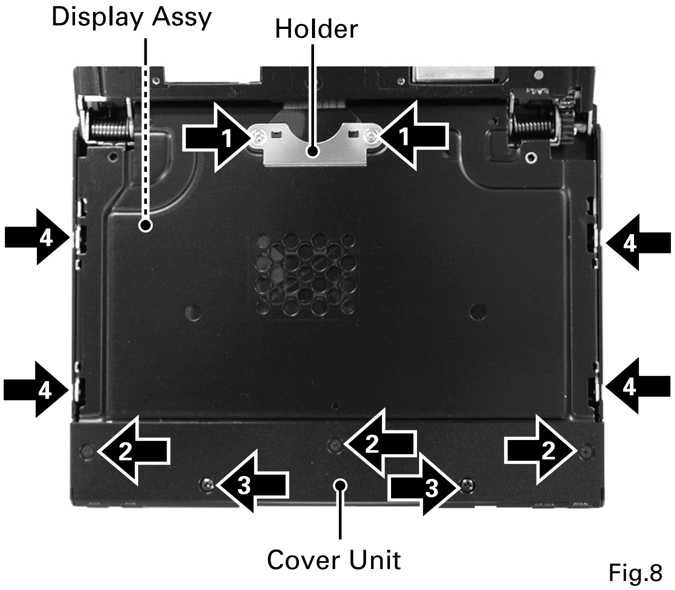

Display Assy
Holder
1
1
4
4
4
4
2
2
2
3
3
Cover Unit

Fig.8

● Removing the Monitor PCB (Fig.9)

1. Straighten the tabs at two locations indicated.
2. Remove the two screws.

Disconnect the connector and then remove the Monitor PCB.

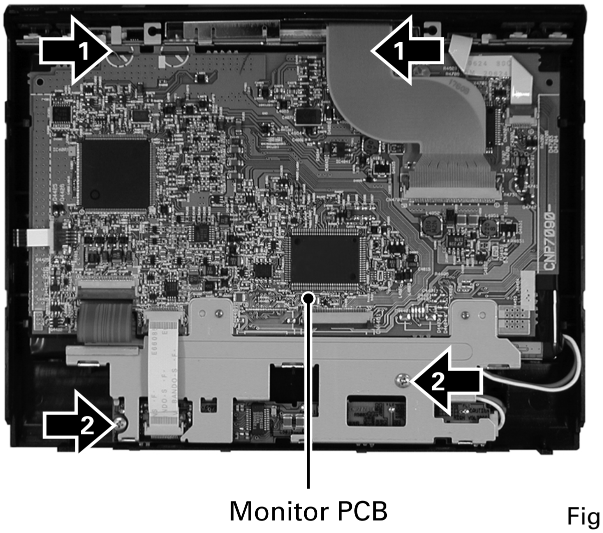
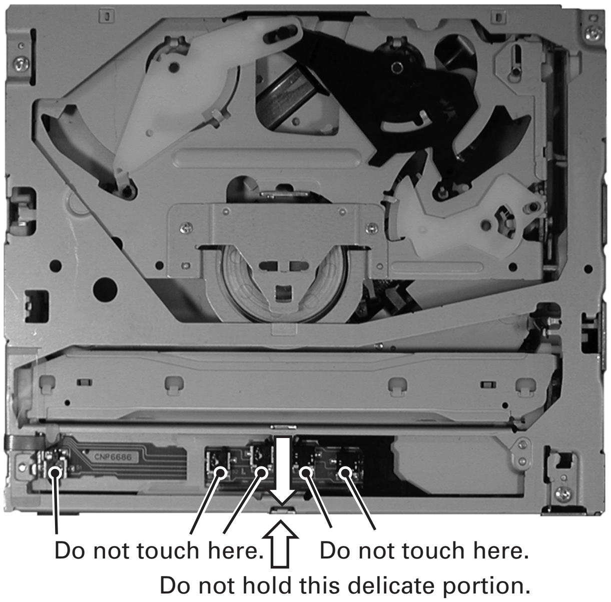

1
1
CNP7000
2
2
Monitor PCB

Fig.9

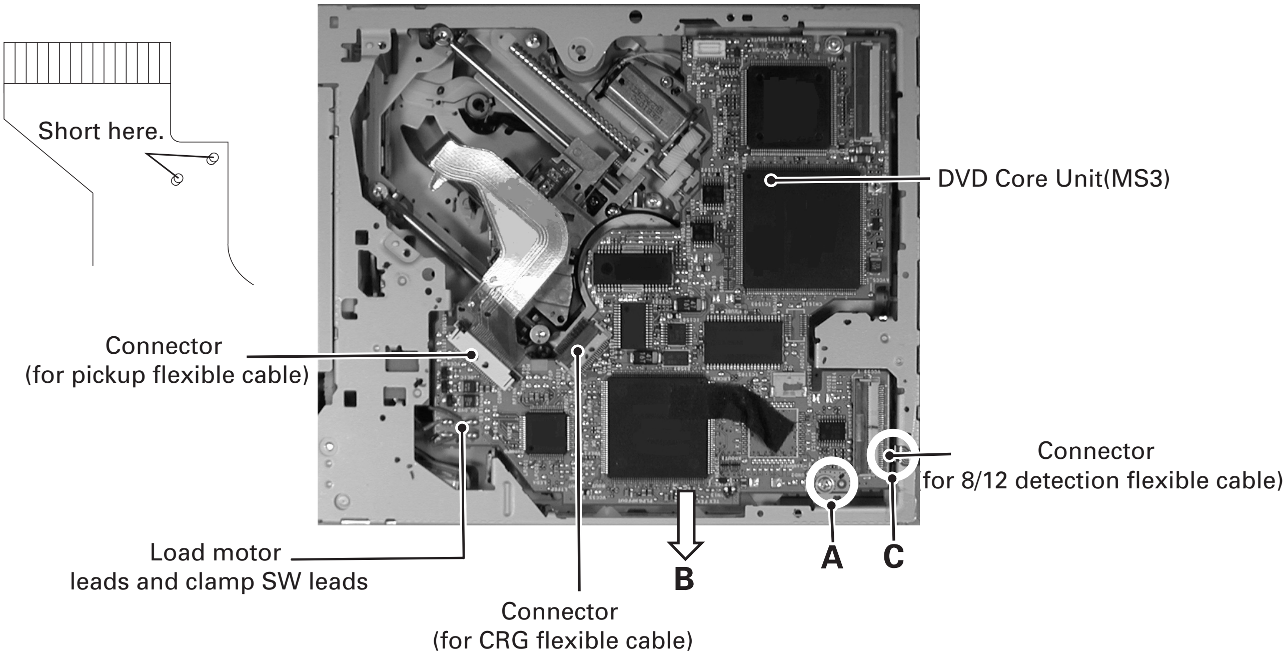
● Precautions on handling the mechanism module

1. Hold the upper and main frames.
2. Do not hold the front portion of the upper frame. It is a delicate part.
3. Do not touch the switches on the top panel.
4. Be careful not to catch the flexible cables.


CNP6686
Do not touch here.
Do not touch here.
Do not hold this delicate portion.

● Removing the module pc board

1. Set the mechanism to the lock position (disc load standby position).
2. Place the mechanism module upside down.
3. Short the two lands on the pickup flexible cable as shown below.
4. Be sure to disconnect the pickup flexible cable and the CRG flexible cable from the connectors to protect them from damages.
5. Remove solder from the load motor leads and clamp SW leads.
6. Loosen the two fixing screws. Lift the position A of the module pc board lightly and move it in the direction B to remove it. Be careful not to damage the flexible cable C.
7. Disconnect the 8/12 detection flexible-cable from the connector.


Short here.
DVD Core Unit(MS3)
Connector
(for pickup flexible cable)
Connector
(for 8/12 detection flexible cable)
Load motor
leads and clamp SW leads
A
C
B
Connector
(for CRG flexible cable)

● Removing the pickup unit

1. Remove the module pc board in accordance with the procedure of "Removing the module pc board."
2. While holding the pickup case, remove the skew screw (main).
3. Lifting the end of the pickup rack, slide the main shaft, and remove the pickup unit.

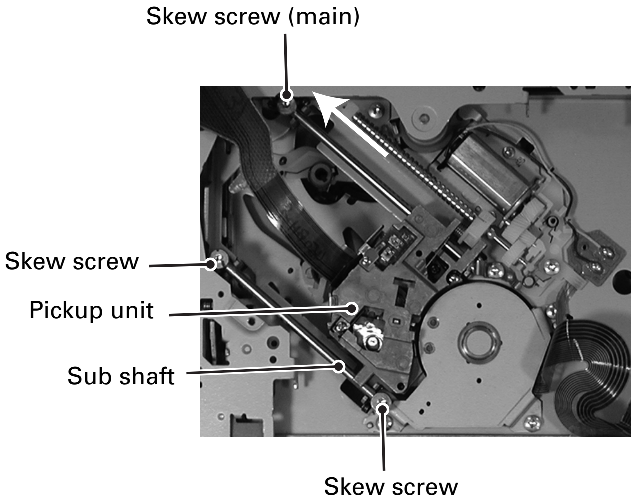
Notes:

Replacing the pickup unit requires the skew adjustment.

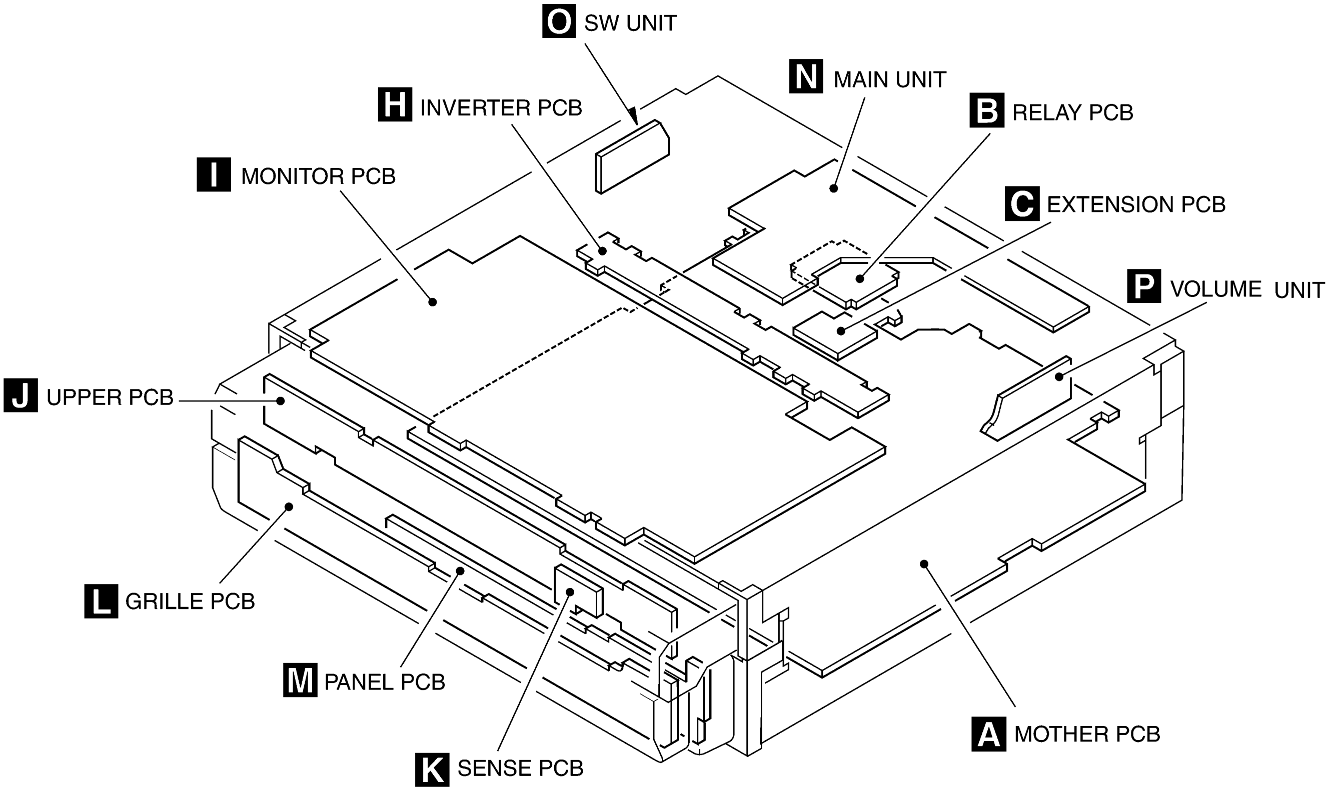
Remove glue from both ends of the main and sub shafts, and skew stud.

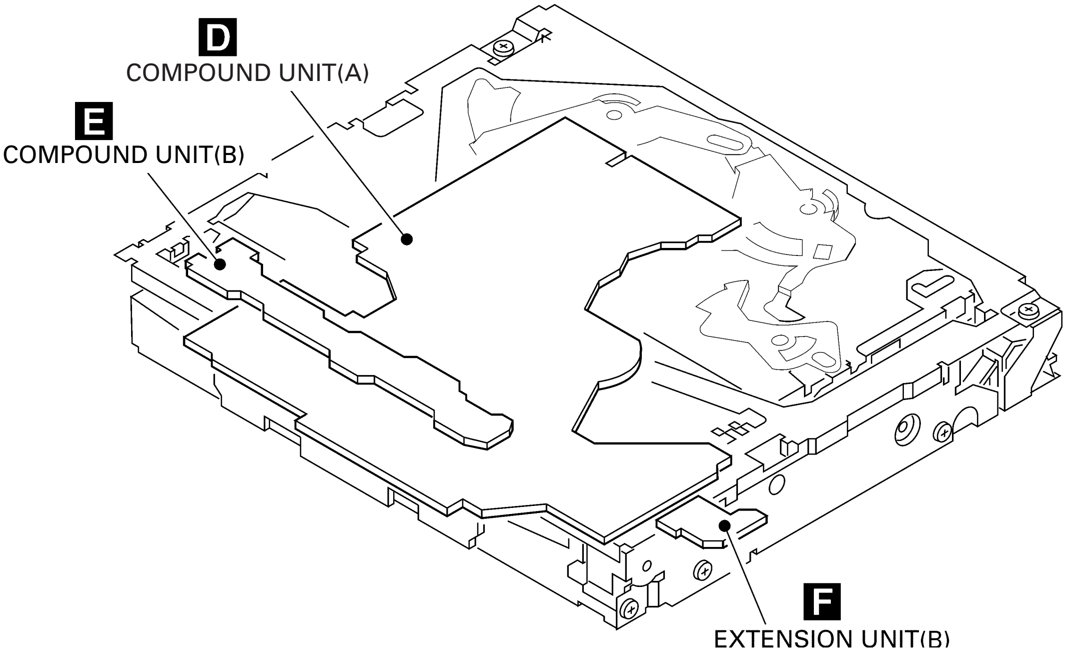
Do not reuse the old skew screw. Be sure to use a brand-new skew screw supplied with a new pickup unit.

Fix the skew screw with Screw lock (GYL1001) after adjustment.



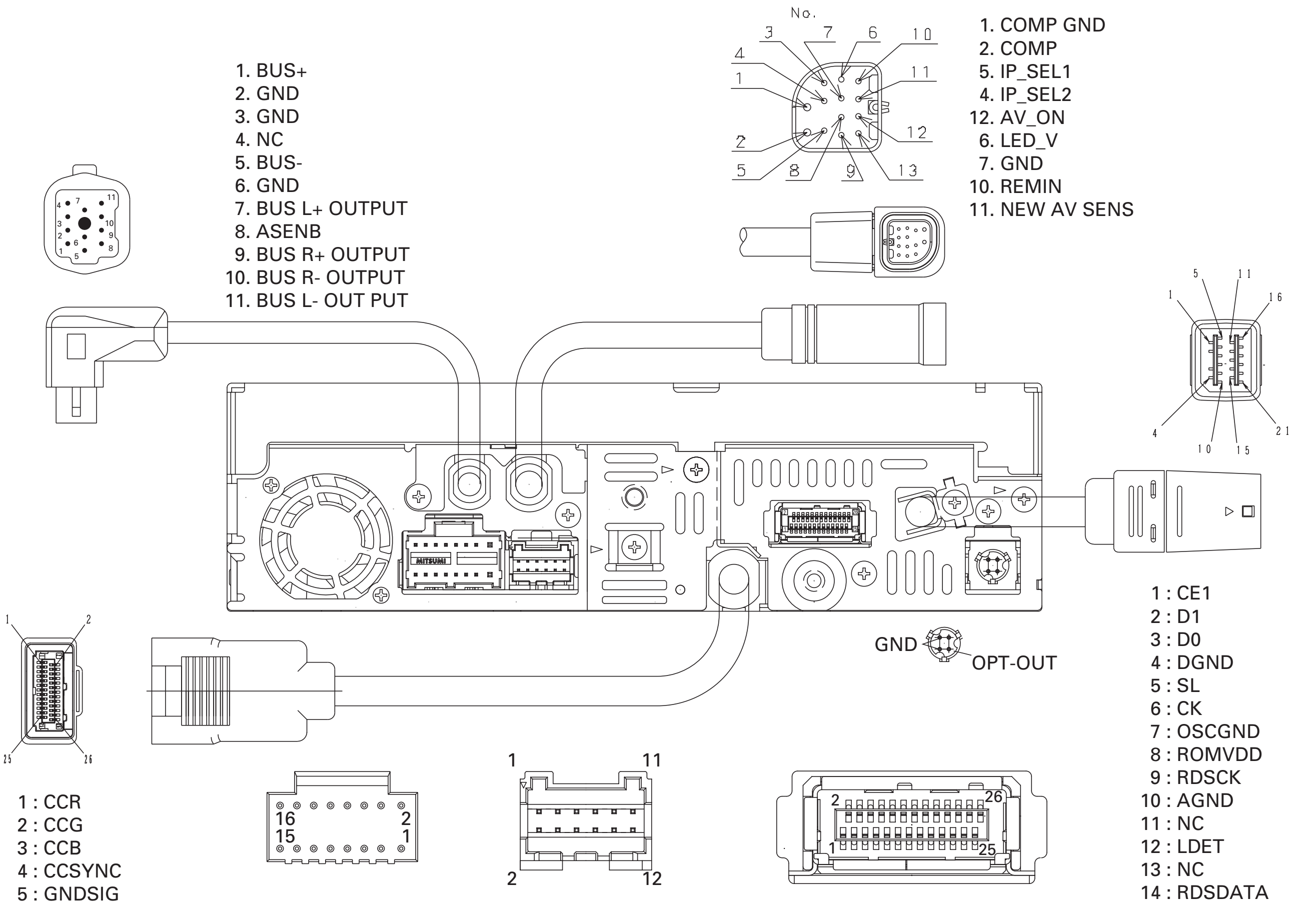
7.1.2 PCB LOCATIONS


O SW UNIT
N MAIN UNIT
H INVERTER PCB
B RELAY PCB
I MONITOR PCB
C EXTENSION PCB
P VOLUME UNIT
J UPPER PCB
L GRILLE PCB
M PANEL PCB
K SENSE PCB
A MOTHER PCB


D
COMPOUND UNIT(A)
E
COMPOUND UNIT(B)
F
EXTENSION UNIT(B)

7.1.3 CONNECTOR FUNCTION DESCRIPTION

AVH-P6500DVD/EW
AVH-P6500DVD/UC



1. BUS+
2. GND
3. GND
4. NC
5. BUS-
6. GND
7. BUS L+ OUTPUT
8. ASENB
9. BUS R+ OUTPUT
10. BUS R- OUTPUT
11. BUS L- OUT PUT

1. COMP GND
2. COMP
5. IP_SEL1
4. IP_SEL2
12. AV_ON
6. LED_V
7. GND
10. REMIN
11. NEW AV SENS

1 : CE1
2 : D1
3 : D0
4 : DGND
5 : SL
6 : CK
7 : OSCGND
8 : ROMVDD
9 : RDSCK
10 : AGND
11 : NC
12 : LDET
13 : NC
14 : RDSDATA
15 : RDSLOCK
16 : RFGND
17 : CE2
18 : NC
19 : NC
20 : NC
21 : NC

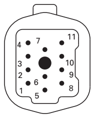
1 : CCR
2 : CCG
3 : CCB
4 : CCSYNC
5 : GNDSIG
6 : DVDVBS
7 : GNDDVD
8 : YS
9 : NC
10 : CCAUL
11 : CCAUR
12 : GNDAU
13 : ONSEI+
14 : ONSEI-
15 : REAUR
16 : REAUL
17 : GNDRAU
18 : CCREM
19 : DSEN
20 : TVON
21 : GION
22 : MONON
23 : VSW5
24 : HTXD
25 : HRXD
26 : GNDD
27 :
28 :
29 :
30 :

1 : GND
2 : B.UP
3 : MUTE
4 : ILL
5 : B.REM
6 : ACC
7 : VGND
8 : P.B.
9 : RR+
10 : FR+
11 : RR-
12 : FR-
13 : RL+
14 : FL+
15 : RL-
16 : FL-

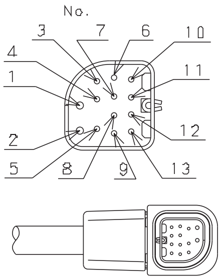
1 : FL
2 : FLGND
3 : FR
4 : FRGND
5 : RL
6 : RLGND
7 : RR
8 : RRGND
9 : SWL
10 : SWLGND
11 : SWR
12 : SWRGND

1 : VGND3
2 : BCAM
3 : µGND
4 : VGND2
5 : AUXV
6 : NC
7 : AGND2
8 : AUXR
9 : AUXL
10 : NC
11 : NC
12 : BGSENS
13 : NC
14 : NC
15 : NC
16 : NC
17 : BEGND
18 : TUNR
19 : TUNL
20 : NC
21 : VGND1
22 : REARV
23 : NC
24 : AGND1
25 : REARR
26 : REARL

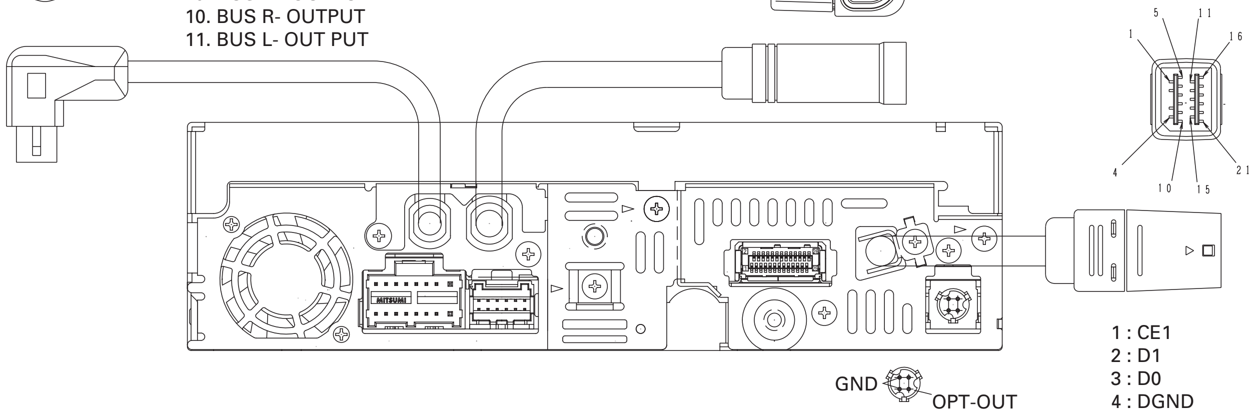
AVH-P6550DVD/RC
AVH-P6550DVD/RD


4
7
11
3
10
2
6
9
1
5
8

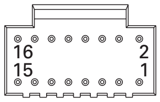
1. BUS+
2. GND
3. GND
4. NC
5. BUS-
6. GND
7. BUS L+ OUTPUT
8. ASENB
9. BUS R+ OUTPUT
10. BUS R- OUTPUT
11. BUS L- OUT PUT


No.
3
7
6
10
4
11
1
2
12
5
8
9
13

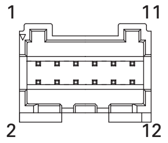
1. COMP GND
2. COMP
5. IP_SEL1
4. IP_SEL2
12. AV_ON
6. LED_V
7. GND
10. REMIN
11. NEW AV SENS


MITSUMI
5
11
1
16
4
10
15
21
GND
OPT-OUT

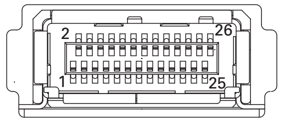
1 : CE1
2 : D1
3 : D0
4 : DGND
5 : SL
6 : CK
7 : OSCGND
8 : ROMVDD
9 : RDSCK
10 : AGND
11 : NC
12 : LDET
13 : NC
14 : RDSDATA
15 : RDSLOCK
16 : RFGND
17 : CE2
18 : NC
19 : NC
20 : NC
21 : NC



1 : GND
2 : B.UP
3 : MUTE
4 : ILL
5 : B.REM
6 : ACC
7 : VGND
8 : P.B.
9 : RR+
10 : FR+
11 : RR-
12 : FR-
13 : RL+
14 : FL+
15 : RL-
16 : FL-



1 : FL
2 : FLGND
3 : FR
4 : FRGND
5 : RL
6 : RLGND
7 : RR
8 : RRGND
9 : SWL
10 : SWLGND
11 : SWR
12 : SWRGND



1 : VGND3
2 : BCAM
3 : μGND
4 : VGND2
5 : AUXV
6 : NC
7 : AGND2
8 : AUXR
9 : AUXL
10 : NC
11 : NC
12 : BGSENS
13 : NC
14 : NC
15 : NC
16 : NC
17 : BEGND
18 : TUNR
19 : TUNL
20 : NC
21 : VGND1
22 : REARV
23 : NC
24 : AGND1
25 : REARR
26 : REARL

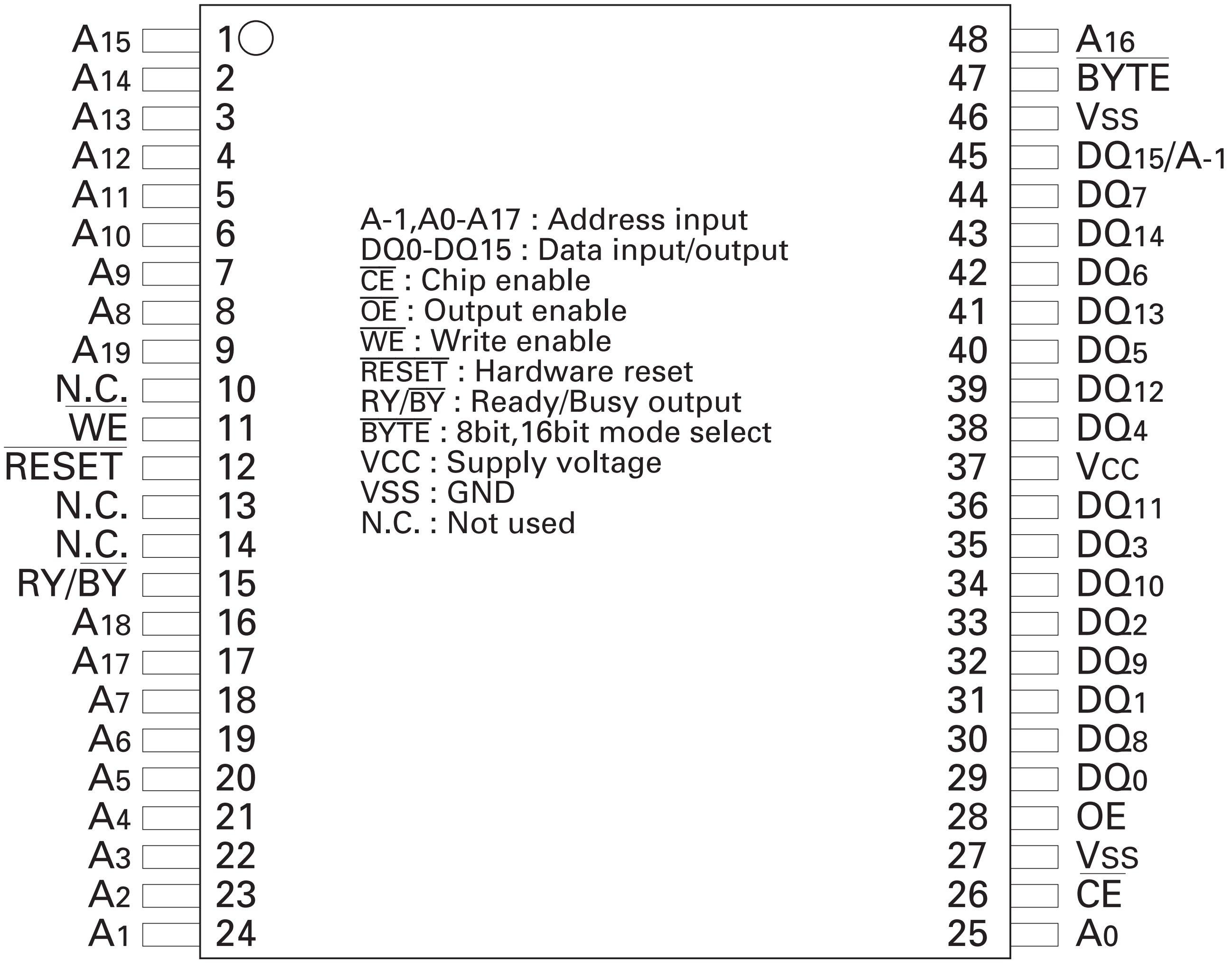
7.2 PARTS

7.2.1 IC

PD6447A
PE5395A
PCM1742KE
TC7PA04FU
MNZS26EDCUB
MN677531KAUB
M2V64S40DTP-6L
AN8471SAT1
AN8703FH
SM8707FV
BA00ASFP
PE5347A
S-80841CNUA-B82
AN8011S
SM5304AV
BP5451
S-812C50AUA-C3E
TC90A64AF-P
TC7SZ02FU
TC7SZ32FU
PD5842A
PD6340A
R1130H251B
0Z961IS
SI6544DQ
S-80827CNNB-B8M

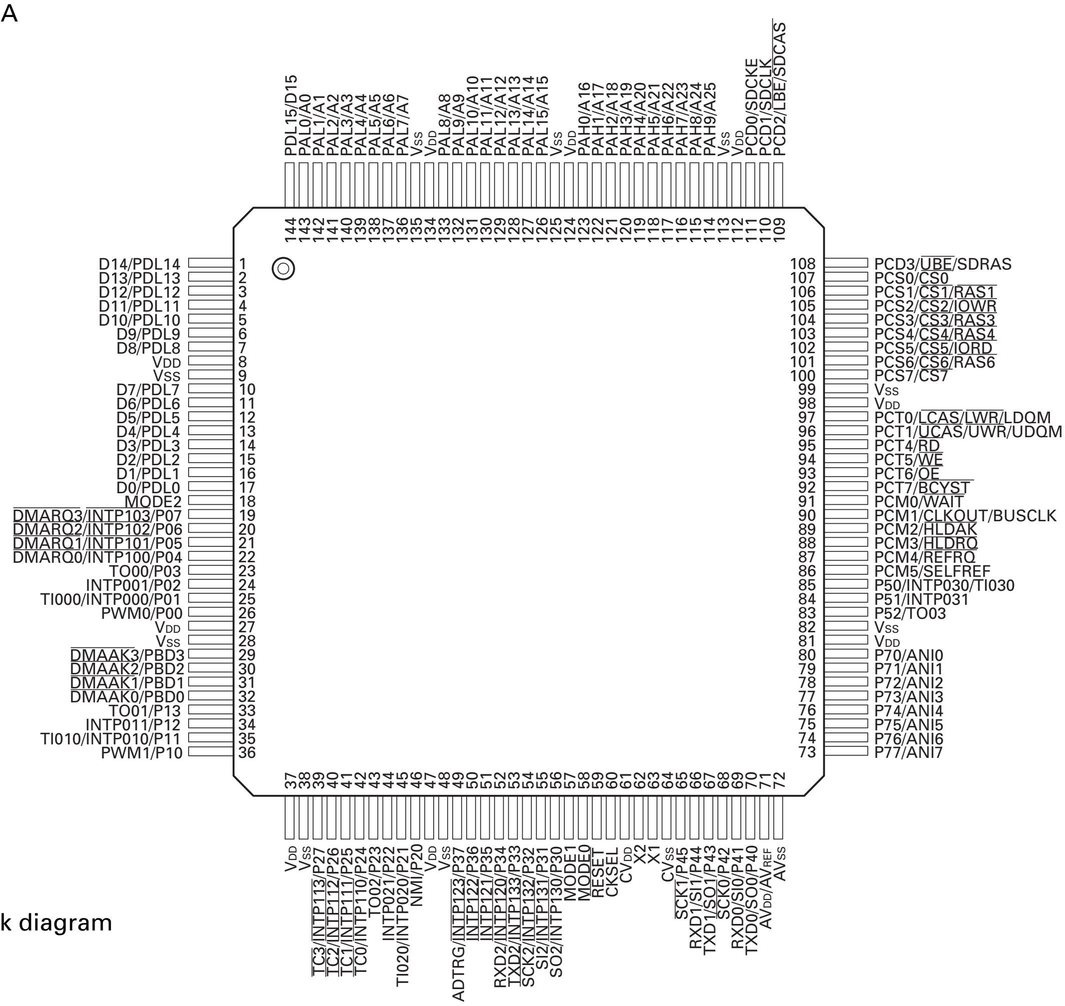
IC's marked by * are MOS type.
Be careful in handling them because they are
very liable to be damaged by electrostatic induction.

*PD6447A


A_{15} 1
A_{14} 2
A_{13} 3
A_{12} 4
A_{11} 5
A_{10} 6
A_9 7
A_8 8
A_{19} 9
N.C. 10
$\overline{WE}$ 11
$\overline{RESET}$ 12
N.C. 13
N.C. 14
RY/$\overline{BY}$ 15
A_{18} 16
A_{17} 17
A_7 18
A_6 19
A_5 20
A_4 21
A_3 22
A_2 23
A_1 24
48 A_{16}
47 $\overline{BYTE}$
46 V_{SS}
45 DQ_{15}/A_{-1}
44 DQ_7
43 DQ_{14}
42 DQ_6
41 DQ_{13}
40 DQ_5
39 DQ_{12}
38 DQ_4
37 V_{CC}
36 DQ_{11}
35 DQ_3
34 DQ_{10}
33 DQ_2
32 DQ_9
31 DQ_1
30 DQ_8
29 DQ_0
28 OE
27 V_{SS}
26 $\overline{CE}$
25 A_0

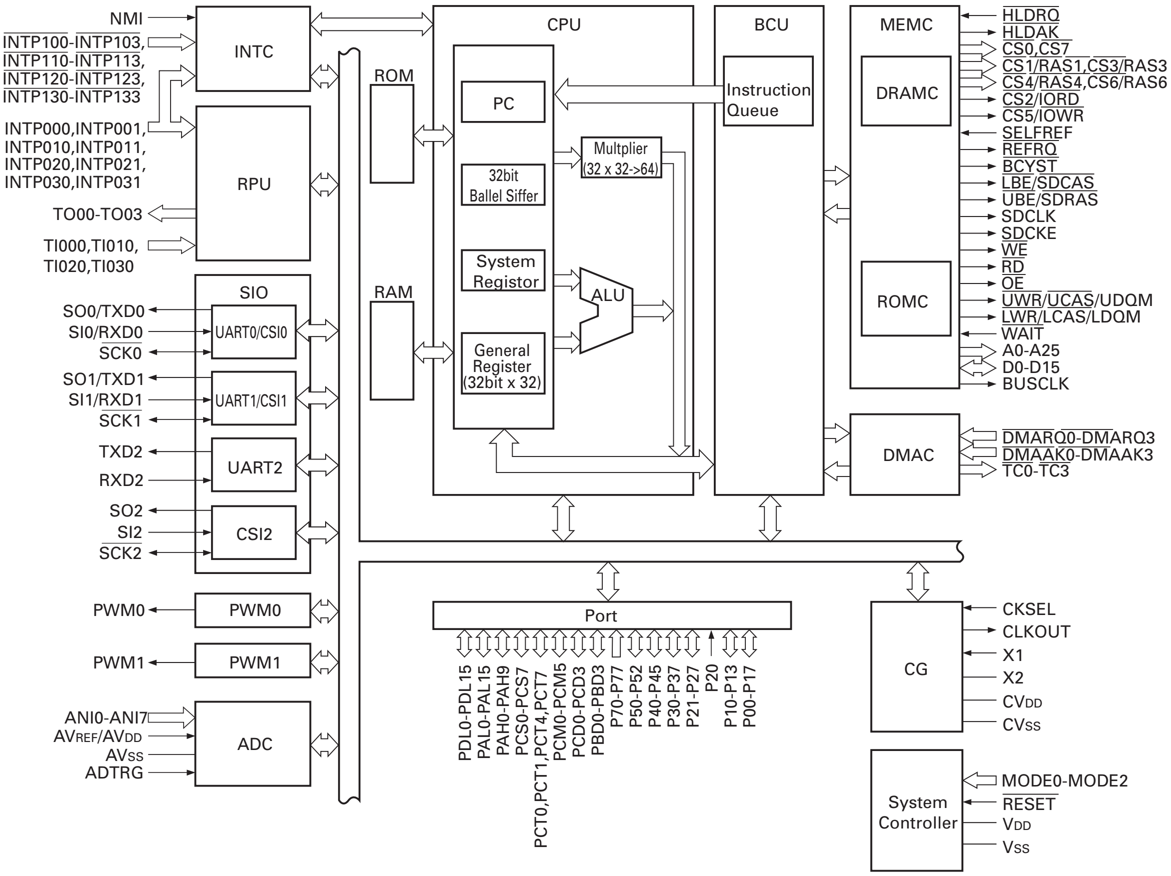
A-1,A0-A17 : Address input
DQ0-DQ15 : Data input/output
$\overline{CE}$: Chip enable
$\overline{OE}$: Output enable
$\overline{WE}$: Write enable
$\overline{RESET}$: Hardware reset
RY/$\overline{BY}$: Ready/Busy output
$\overline{BYTE}$: 8bit,16bit mode select
VCC : Supply voltage
VSS : GND
N.C. : Not used

*PE5395A



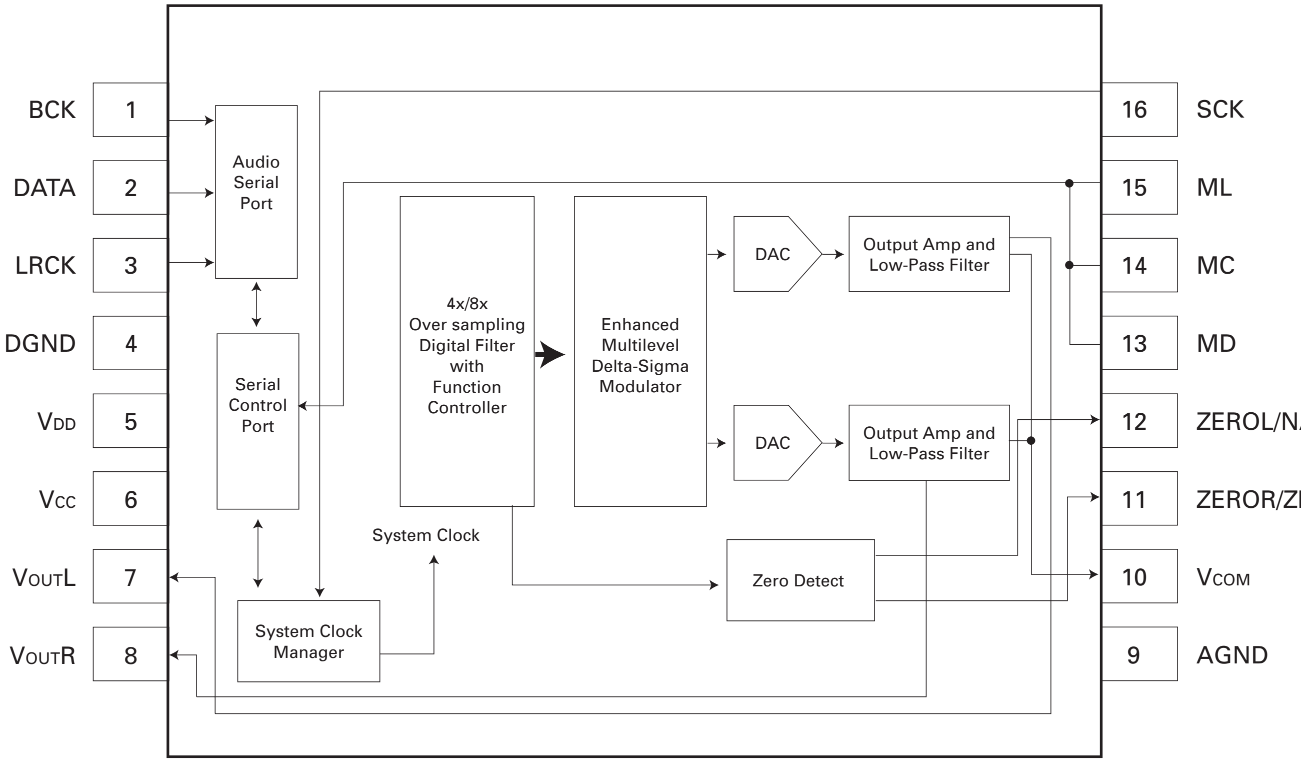
144 PDL15/D15
143 PAL0/A0
142 PAL1/A1
141 PAL2/A2
140 PAL3/A3
139 PAL4/A4
138 PAL5/A5
137 PAL6/A6
136 PAL7/A7
135 VSS
134 VDD
133 PAL8/A8
132 PAL9/A9
131 PAL10/A10
130 PAL11/A11
129 PAL12/A12
128 PAL13/A13
127 PAL14/A14
126 PAL15/A15
125 VSS
124 VDD
123 PAH0/A16
122 PAH1/A17
121 PAH2/A18
120 PAH3/A19
119 PAH4/A20
118 PAH5/A21
117 PAH6/A22
116 PAH7/A23
115 PAH8/A24
114 PAH9/A25
113 VSS
112 VDD
111 PCD0/SDCKE
110 PCD1/SDCLK
109 PCD2/LBE/SDCAS
1 D14/PDL14
2 D13/PDL13
3 D12/PDL12
4 D11/PDL11
5 D10/PDL10
6 D9/PDL9
7 D8/PDL8
8 VDD
9 VSS
10 D7/PDL7
11 D6/PDL6
12 D5/PDL5
13 D4/PDL4
14 D3/PDL3
15 D2/PDL2
16 D1/PDL1
17 D0/PDL0
18 MODE2
19 DMARQ3/INTP103/P07
20 DMARQ2/INTP102/P06
21 DMARQ1/INTP101/P05
22 DMARQ0/INTP100/P04
23 TO00/P03
24 INTP001/P02
25 TI000/INTP000/P01
26 PWM0/P00
27 VDD
28 VSS
29 DMAAK3/PBD3
30 DMAAK2/PBD2
31 DMAAK1/PBD1
32 DMAAK0/PBD0
33 TO01/P13
34 INTP011/P12
35 TI010/INTP010/P11
36 PWM1/P10
108 PCD3/UBE/SDRAS
107 PCS0/CS0
106 PCS1/CS1/RAS1
105 PCS2/CS2/IOWR
104 PCS3/CS3/RAS3
103 PCS4/CS4/RAS4
102 PCS5/CS5/IORD
101 PCS6/CS6/RAS6
100 PCS7/CS7
99 VSS
98 VDD
97 PCT0/LCAS/LWR/LDQM
96 PCT1/UCAS/UWR/UDQM
95 PCT4/RD
94 PCT5/WE
93 PCT6/OE
92 PCT7/BCYST
91 PCM0/WAIT
90 PCM1/CLKOUT/BUSCLK
89 PCM2/HLDAK
88 PCM3/HLDRQ
87 PCM4/REFRQ
86 PCM5/SELFREF
85 P50/INTP030/TI030
84 P51/INTP031
83 P52/TO03
82 VSS
81 VDD
80 P70/ANI0
79 P71/ANI1
78 P72/ANI2
77 P73/ANI3
76 P74/ANI4
75 P75/ANI5
74 P76/ANI6
73 P77/ANI7
37 VDD
38 VSS
39 TC3/INTP113/P27
40 TC2/INTP112/P26
41 TC1/INTP111/P25
42 TC0/INTP110/P24
43 TO02/P23
44 INTP021/P22
45 TI020/INTP020/P21
46 NMI/P20
47 VDD
48 VSS
49 ADTRG/INTP123/P37
50 INTP122/P36
51 INTP121/P35
52 RXD2/INTP120/P34
53 TXD2/INTP133/P33
54 SCK2/INTP132/P32
55 SI2/INTP131/P31
56 SO2/INTP130/P30
57 MODE1
58 MODE0
59 RESET
60 CKSEL
61 CVDD
62 X2
63 X1
64 CVSS
65 SCK1/P45
66 RXD1/SI1/P44
67 TXD1/SO1/P43
68 SCK0/P42
69 RXD0/SI0/P41
70 TXD0/SO0/P40
71 AVDD/AVREF
72 AVSS

● Block diagram

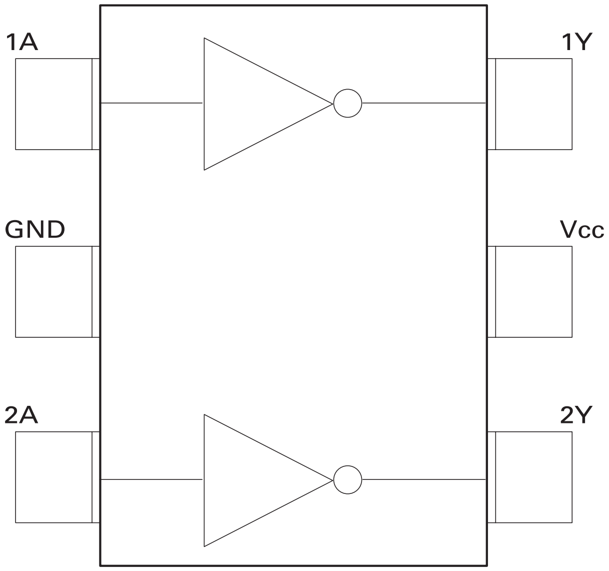


NMI
INTP100-INTP103,
INTP110-INTP113,
INTP120-INTP123,
INTP130-INTP133
INTC
INTP000,INTP001,
INTP010,INTP011,
INTP020,INTP021,
INTP030,INTP031
RPU
TO00-TO03
TI000,TI010,
TI020,TI030
SIO
SO0/TXD0
SI0/RXD0
SCK0
UART0/CSI0
SO1/TXD1
SI1/RXD1
SCK1
UART1/CSI1
TXD2
RXD2
UART2
SO2
SI2
SCK2
CSI2
PWM0
PWM1
ANI0-ANI7
AVREF/AVDD
AVSS
ADTRG
ADC
ROM
RAM
CPU
PC
32bit
Ballel Siffer
Multplier
(32 x 32->64)
System
Registor
ALU
General
Register
(32bit x 32)
BCU
Instruction
Queue
MEMC
DRAMC
ROMC
HLDRQ
HLDAK
CS0,CS7
CS1/RAS1,CS3/RAS3
CS4/RAS4,CS6/RAS6
CS2/IORD
CS5/IOWR
SELFREF
REFRQ
BCYST
LBE/SDCAS
UBE/SDRAS
SDCLK
SDCKE
WE
RD
OE
UWR/UCAS/UDQM
LWR/LCAS/LDQM
WAIT
A0-A25
D0-D15
BUSCLK
DMAC
DMARQ0-DMARQ3
DMAAK0-DMAAK3
TC0-TC3
Port
PDL0-PDL15
PAL0-PAL15
PAH0-PAH9
PCS0-PCS7
PCT0,PCT1,PCT4,PCT7
PCM0-PCM5
PCD0-PCD3
PBD0-PBD3
P70-P77
P50-P52
P40-P45
P30-P37
P21-P27
P20
P10-P13
P00-P17
CG
CKSEL
CLKOUT
X1
X2
CVDD
CVSS
System
Controller
MODE0-MODE2
RESET
VDD
VSS

PCM1742KE


BCK
1
DATA
2
LRCK
3
DGND
4
VDD
5
VCC
6
VOUTL
7
VOUTR
8
16
SCK
15
ML
14
MC
13
MD
12
ZEROL/N
11
ZEROR/Z
10
VCOM
9
AGND
Audio Serial Port
Serial Control Port
System Clock Manager
System Clock
4x/8x Over sampling Digital Filter with Function Controller
Enhanced Multilevel Delta-Sigma Modulator
DAC
DAC
Output Amp and Low-Pass Filter
Output Amp and Low-Pass Filter
Zero Detect

*TC7PA04FU


1A
GND
2A
1Y
Vcc
2Y

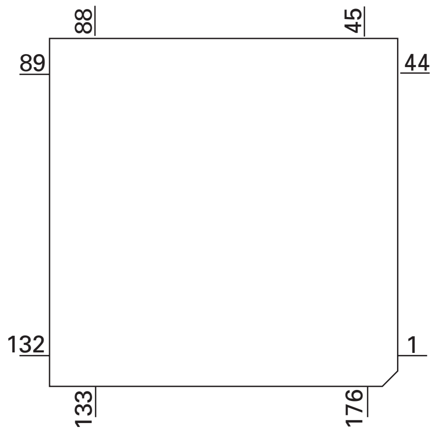
Pin Functions (MNZS26EDCUB)

Pin No.	Pin Name	I / O	Function and Operation
1,2	NINT0,1	O	System computer interrupt signal
3	VDD3	O	Power supply
4	VSS		GND
5	NINT2		System computer interrupt signal
6	WAITODC	O	System computer bus wait control out put
7	NMRST	O	Reset output to system computer
8	DASPST	O	DASP initialize value input
9-17	CPUADR17-9	I	System computer address input
18	ADD18		Power supply for I O
19	VSS		GND
20	DRAMVDD18		Power supply for DRAM
21	DRAMVSS		GND for DRAM
22-30	CPUADR8-0	I	System computer address
31	VDD3		Power supply
32	VSS		GND
33	DRAMVDD33		Power supply for DRAM
34	NCS	I	Chip select signal from system computer
35	NWR	I	Write signal input from system computer
36	NRD	I	Read signal input from system computer
37-44	CPUDT7-0	I / O	System computer data
45	CLKOUT	O	System computer clock output
46	MMOD	I	GND
47	NRST	I	Reset input
48	MSTPOL	I	Pull up
49	SCLOCK	I / O	Pull up
50	SDATA	I / O	Pull up
51	OFTR	I	Off track signal input
52	BDO	I	RF dropout signal input
53-56	PWM1-4	I / O	PWM output
57	VDD3		Power supply
58	DRAMVDD18		Power supply for DRAM
59	DRAMVSS		GND for DRAM
60	VSS		GND
61-64	PWM5-8	I / O	PWM put out
65	TBAL	O	Tracking balance adjustment output
66	FBAL	O	Focus balance adjustment output
67	TRSDRV	O	Traverse driver output
68	SPDRV	O	Spindle driver output
69	FG	I	FG signal input
70	TILTP	O	TILTP pin
71	TILT	O	TILT pin
72	TILTN	O	TILTN pin
73	TX	O	Digital audio interface data output
74	DTRD	O	Data read control signal output
75	IDGT	O	Not used
76	VDD18		Power supply
77	VSS		GND
78	VDD3		Power supply
79	OSCI1	I	Oscillator pin input
80	OSCO1	O	Oscillator pin output
81	VSS		GND
82	TSTSG	O	Calibration signal output
83	VFOSHORT	O	VFO short output
84	JLINE	O	J-LINE output
85	AVSSD		GND for analog
86	ROUT	O	Analog audio right output

Pin No.	Pin Name	I / O	Function and Operation
87	LOUT	O	Analog audio left output
88	AVDDD		Power supply for analog
89	VCOS	I	JFVCO control voltage
90	TRCRS	I	Track cross production signal input
91	CMPIN	I	WOBBLE comparator input
92	LPFOUT	O	LPF output
93	LPFIN	I	LPF input
94	AVSSC		GND for analog
95	HPFOUT	O	HPF output
96	FPFIN	I	HPF input
97	CSLFLT	I	Capacitor for CPDET
98	RFDIF	I	RF input for CPDET
99	AVDDC		Power supply for analog
100,101	PLFLT2,1	I	PLL capacitor output
102	AVSSB		GND for analog
103	RVI	I	VERFH reference current resistor input/output
104	VREFH	I	Reference voltage (2.2±0.1V)
105	PLPG	I	PLPG pin
106	VHALF	I	Reference voltage (1.65±0.1V)
107,108	DSLF2,1	I	DSL capacitor input/output 1
109	AVDDB		Power supply for analog
110	NARF	I	Equivalent RF-input
111	ARF	I	Equivalent RF+ input
112	JITOUT	O	Jitter signal monitor input/output
113	AVSSA		GND for analog
114	DAC0	O	Tracking drive output
115	DAC1	O	Focus drive output
116	AVDDA		Power supply for analog
117	AD0	I	FE input
118	AD1	I	TEph / TE3b / TEpp input
119	AD2	I	AS input
120	AD3	I	RF env input
121	AD4	I	VHALF connect
122	AD5/CAPAC2	I	VHALF connect
123	AD6/CAPAC1	I	VHALF connect
124	TECAPA	I	VHALF connect
125	VDD3		Power supply
126	VSS		GND
127-130	MONI0-3	O	Monitor for inside signal
131	NEJECT	I / O	Eject sense
132	NTRYCL	I / O	Try close sense
133	NDASP	I / O	ATAPI drive active/slave connect input/output
134	NCS3FX	I	ATAPI HOST chip select
135	NCS1FX	I	ATAPI HOST chip select
136	DA2	I / O	ATAPI HOST address input/output 2
137	DA0	I / O	ATAPI HOST address input/output 0
138	NPDIAG	I / O	ATAPI slave/master diagnosis input/output
139	DA1	I / O	ATAPI HOST address input/output 1
140	NIOCS16	O	ATAPI HOST data bus width select output
141	INTRQ	O	ATAPI HOST interrupt request output
142	NDMACK	I	ATAPI HOST DMA response
143	VDD3		Power supply
144	VSS		GND
145	IORDY	O	ATAPI HOST ready output
146	NIORD	I / O	ATAPI HOST data read
147	NIOWR	I / O	ATAPI HOST data write

Pin No.	Pin Name	I / O	Function and Operation
148	DMARQ	O	ATAPI HOST DMA request output
149	HDD15	I / O	ATAPI HOST data input/output 15
150	HDD0	I / O	ATAPI HOST data input/output 0
151	HDD14	I / O	ATAPI HOST data input/output 14
152	VDD18		Power supply
153	PO	I	(GND)
154	UATASEL	I	Internal clock select input
155	VSS		GND
156	VDD3		Power supply
157	HDD1	I / O	ATAPI HOST data input/output 1
158	HDD13	I / O	ATAPI HOST data input/output 13
159	HDD2	I / O	ATAPI HOST data input/output 2
160	HDD12	I / O	ATAPI HOST data input/output 12
161	HDD3	I / O	ATAPI HOST data input/output 3
162	VDD3		Power supply
163	VSS		GND
164	HDD11	I / O	ATAPI HOST data input/output 11
165	HDD4	I / O	ATAPI HOST data input/output 4
166	HDD10	I / O	ATAPI HOST data input/output 10
167	HDD5	I / O	ATAPI HOST data input/output 5
168	HDD9	I / O	ATAPI HOST data input/output 9
169	HDD3		ATAPI HOST data input/output 3
170	VSS		GND
171	HDD6	I / O	ATAPI HOST data input/output 6
172	HDD8	I / O	ATAPI HOST data input/output 8
173	HDD7	I / O	ATAPI HOST data input/output 7
174	VDDH		ATAPI reference power supply (5.0V)
175	NRESET	I	ATAPI host reset input
176	MASTER	I	ATAPI master/slave select input/output

*MNZS26EDCUB



● Pin Functions (MN677531KAUB)

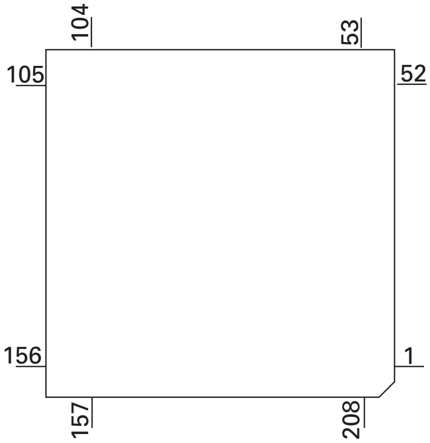
Pin No.	Pin Name	I / O	Function and Operation
1	VDD		Power supply
2	MA0	O	Bank sell and address
3	MA6	O	Bank sell and address
4	MA1	O	Bank sell and address
5	LVDD		Lch Power supply
6	MA5	O	Bank sell and address
7	MA2	O	Bank sell and address
8	MA4	O	Bank sell and address
9	VSS		GND
10	MA3	O	Bank sell and address
11	VDD		Power supply
12	HMD	I	Host CPU select
13	XRST	I	System reset
14	ERRMON	O	Error monitor
15	RFF	O	Repeat first field flag output
16	LVDD		Lch Power supply
17	XHINT	O	Interrupt strobe
18	XHINT2	O	Interrupt strobe
19	XKD	O	Data acknowledge to host
20	VSS		GND
21	XWRH	I	Write enable from host
22	XWR	I	Write enable
23	XRD	I	Read enable
24	XCS	I	Chip select
25	VDD		Power supply
26	HCLK	I	Host CPU clock
27-30	HA1-4	I	Address bus
31	VSS	I	GND
32-36	HA5-9	I	Address bus
37	LVDD		Lch Power supply
38-42	HA10-14	I	Address bus
43	VSS		GND
44-46	HA15-17	I	Address bus
47	HD0	I / O	Data bus
48	VDD		Power supply
49-52	HD1-4	I / O	Data bus
53	VSS		GND
54-56	HD5-7	I / O	Data bus
57	LVDD		Lch Power supply
58-60	HD8-10	I / O	Data bus
61	VDD		Power supply
62,63	HD11,12	I / O	Data bus

Pin No.	Pin Name	I / O	Function and Operation
64	V_{SS}		GND
65-67	HD13-15	I / O	Data bus
68	V_{DD}		Power supply
69	AUDSTR	I	Data strobe
70	VSTR	I	Data strobe
71	VRQ	O	DMA request
72	V_{SS}		GND
73-76	STD7-4	I	Stream data/CD-Audio bypass port
77	LV_{DD}		Lch power supply
78-81	STD3-0	I	Stream data/CD-Audio bypass port
82	V_{SS}		GND
83	IECOUT	O	IEC958 data output
84	DMIX	O	Sound down mix. signal
85	V_{DD}		Power supply
86	DACCK	O	DAC clock output
87	LRCK	O	LR clock output
88	SRCK	O	Bit clock output
89	V_{SS}		GND
90-92	ADOUT0-2	O	Audio data output
93	V_{DD}		Power supply
94	CLK121	I	121.5MHz clock input
95	CKIO	I	81MHz clock select
96	CLK27	I	27MHz clock input
97	$PLLV_{DD}$		PLL
98	CLK81	I	81MHz clock input
99	LV_{DD}		Lch Power supply
100	EXTCK	I	Outside clock output
101	$PLLAV_{DD}$		PLL analog power supply
102	TCPOUT	O	OPEN
103	$PLLAV_{SS}$		OPEN
104	V_{SS}		GND
105	V_{DD}		Power supply
106	PHCOPMO	O	OPEN
107	$PLLAV_{DD}$		PLL analog power supply
108	ACKIO	I	Audio PLL test mode
109	MODE121	I	Clock mode select
110	DCTEST	I	DC test mode
111	$APLLAV_{SS}$		Analog PLL audio GND
112	$APLLAV_{DD}$		Analog PLL power supply
113	VREFCR	I	DAC reference input for CR signal
114	IREFCR	I	DAC resistance terminal for bias current setting for CR signal
115	COMPCR	I	DAC capacity connection terminal for stabilization for CR signal
116	VCROUT	O	DAC output for CR signal

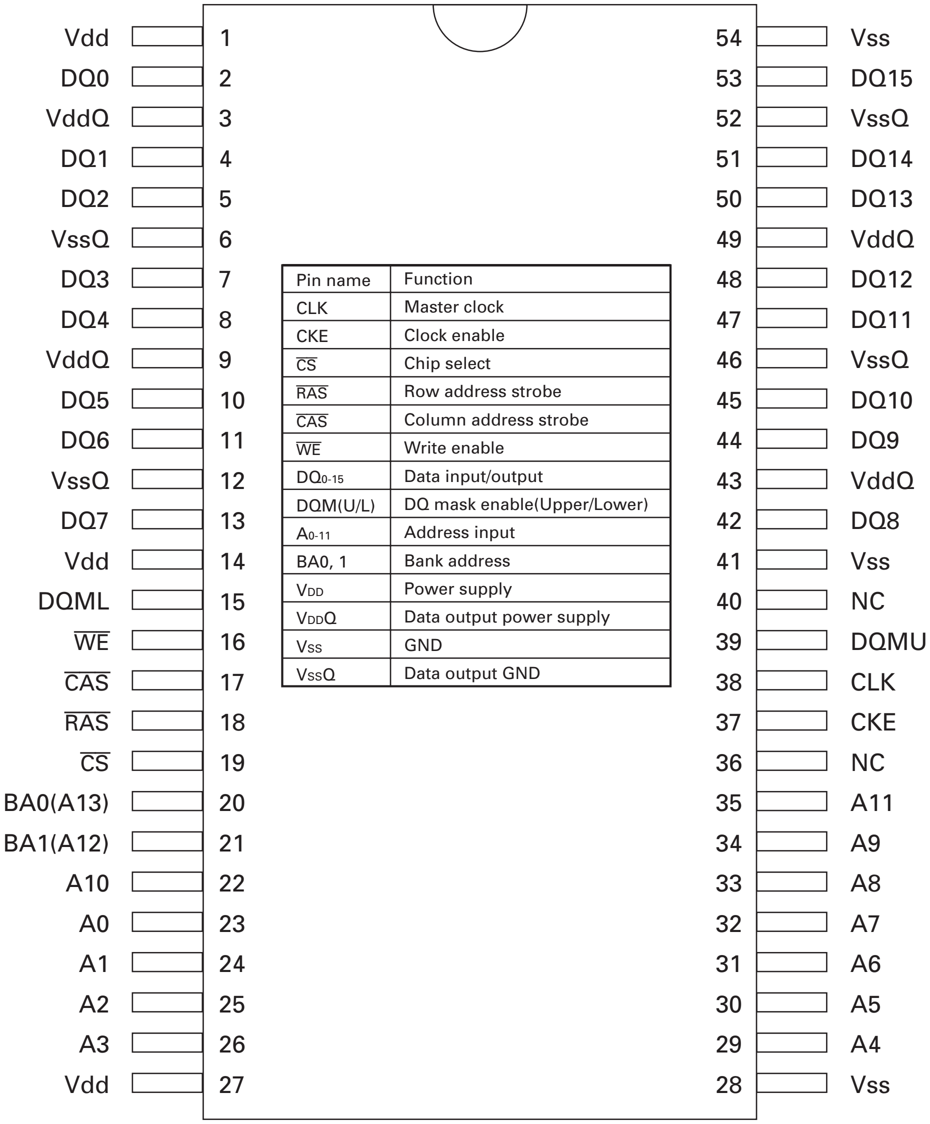
Pin No.	Pin Name	I / O	Function and Operation
117	AVDD		Analog power supply
118	VREFC	I	DAC reference input
119	IREFC	I	DAC resistance terminal for bias current setting
120	COMPC	I	DAC capacity connection terminal for stabilization
121	VCOUT	O	Cr C analog output
122	AVss		Analog GND
123	VREFCB	I	DAC reference input for CB signal
124	IREFCB	I	DAC resistance terminal for bias current setting for CB signal
125	COMPCB	I	DAC capacity connection terminal for stabilization for CB signal
126	VCBOUT	O	DAC output for CB signal
127	AVDD		Analog power supply
128	VREFY	I	DAC reference input
129	IREFY	I	DAC resistance terminal for bias current setting
130	COMPY	I	DAC capacity connection terminal for stabilization
131	VYOUT	O	Y analog output
132	AVss		Analog GND
133,134	TESTSEL1,0	I	Test signal
135	Vss		GND
136	VCLK	I	Video data clock
137-140	REC7-4	I / O	OPEN
141	VDD		Power supply
142,143	REC3,2	I / O	OPEN
144	REC1/ XVSYNCO	I / O	OPEN
145	REC0/ XHSYNCO	I / O	OPEN
146	LVDD		Lch power supply
147-150	VD0-3	O	Video data bus
151	Vss		GND
152-155	VD4-7	O	Video data bus
156	VDD		Power supply
157	Vss		GND
158	MDQ15	I / O	I/O data SDRAM
159	MDQ0	I / O	I/O data SDRAM
160	VDD		Power supply
161	MDQ14	I / O	I/O data SDRAM
162	MD1	I / O	I/O data SDRAM
163	Vss		GND
164	MDQ13	I / O	I/O data SDRAM
165	MDQ2	I / O	I/O data SDRAM
166	VDD		Power supply
167	MDQ12	I / O	I/O data SDRAM
168	MDQ3	I / O	I/O data SDRAM

Pin No.	Pin Name	I / O	Function and Operation
169	VSS		GND
170	MDQ11	I / O	I/O data SDRAM
171	MDQ4	I / O	I/O data SDRAM
172	VDD		Power supply
173	MDQ10	I / O	I/O data SDRAM
174	LVDD		Lch Power supply
175	MDQ5	I / O	I/O data SDRAM
176	VSS		GND
177	MDQ9	I / O	I/O data SDRAM
178	MDQ6	I / O	I/O data SDRAM
179	VDD		Power supply
180	MDQ8	I / O	I/O data SDRAM
181	MDQ7	I / O	I/O data SDRAM
182	VSS		GND
183	MCK1	I	SSDRAM CLK input
184	LVDD		Lch Power supply
185	MCK	O	SDRAM CLK
186	VSS		GND
187	DQMLE	O	Lower byte DQ mask of extended SDRAM
188	VDD		Power supply
189	DQMLM	O	Lower byte DQ mask of main SDRAM
190	DQMUE	O	Upper byte DQ mask of extended SDRAM
191	LVDD		Lch Power supply
192	DQMUM	O	Upper byte DQ mask of main SDRAM
193	XWE	O	Write signal of SDRAM
194	VSS		GND
195	XCAS	O	CAS of SDRAM
196	XRAS	O	RAS of SDRAM
197	VDD		Power supply
198	XCSE	O	CS of extended SDRAM
199	XCSM	O	CS of main SDRAM
200	VSS		GND
201	MA9	O	Bank sell and address
202	LVDD		Lch Power supply
203	MA11	O	Bank sell and address
204	MA8	O	Bank sell and address
205	VDD		Power supply
206	MA10	O	Bank sell and address
207	MA7	O	Bank sell and address
208	VSS		GND

*MN677531KAUB

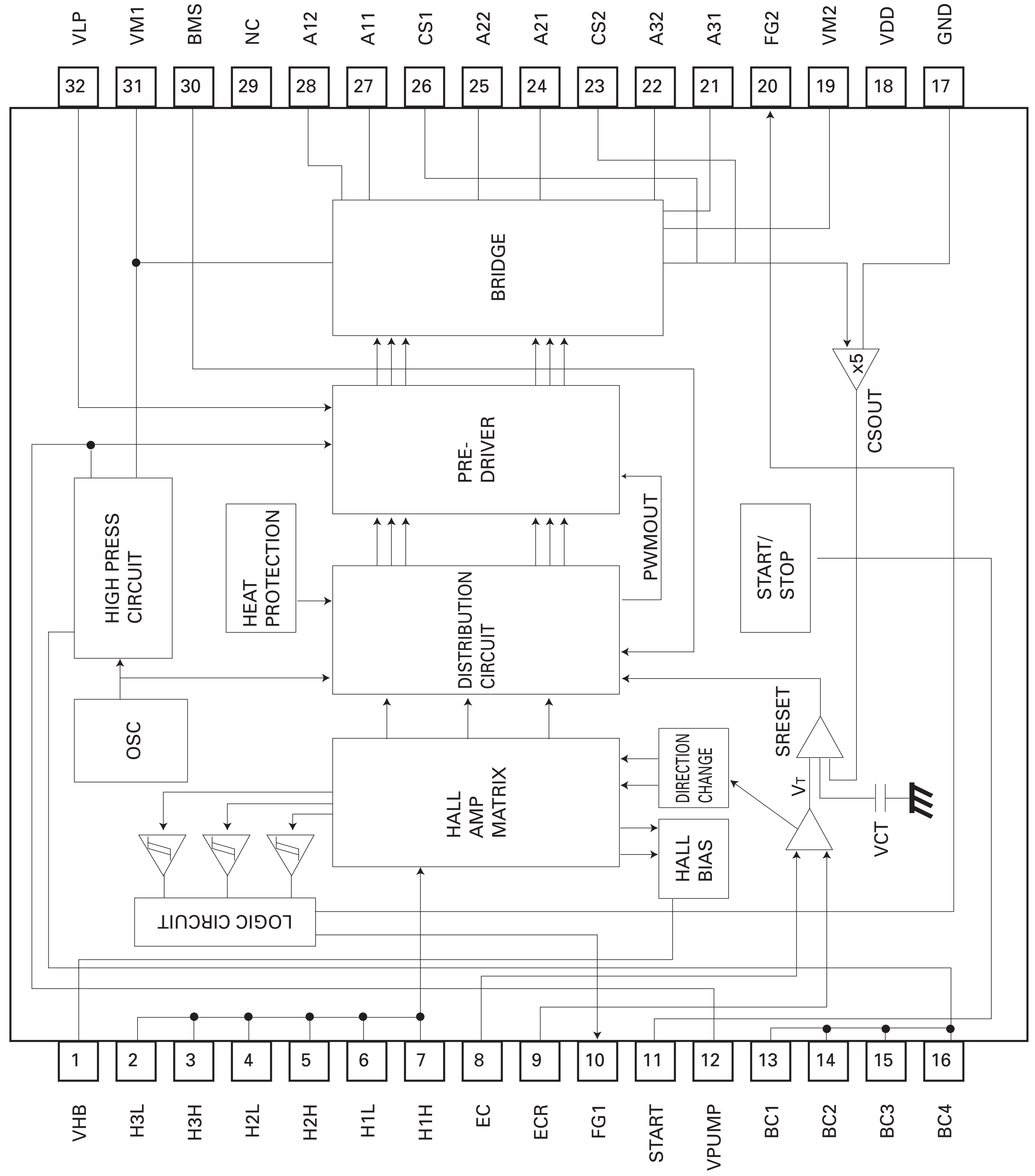

104
53
105
52
156
1
157
208

*M2V64S40DTP-6L

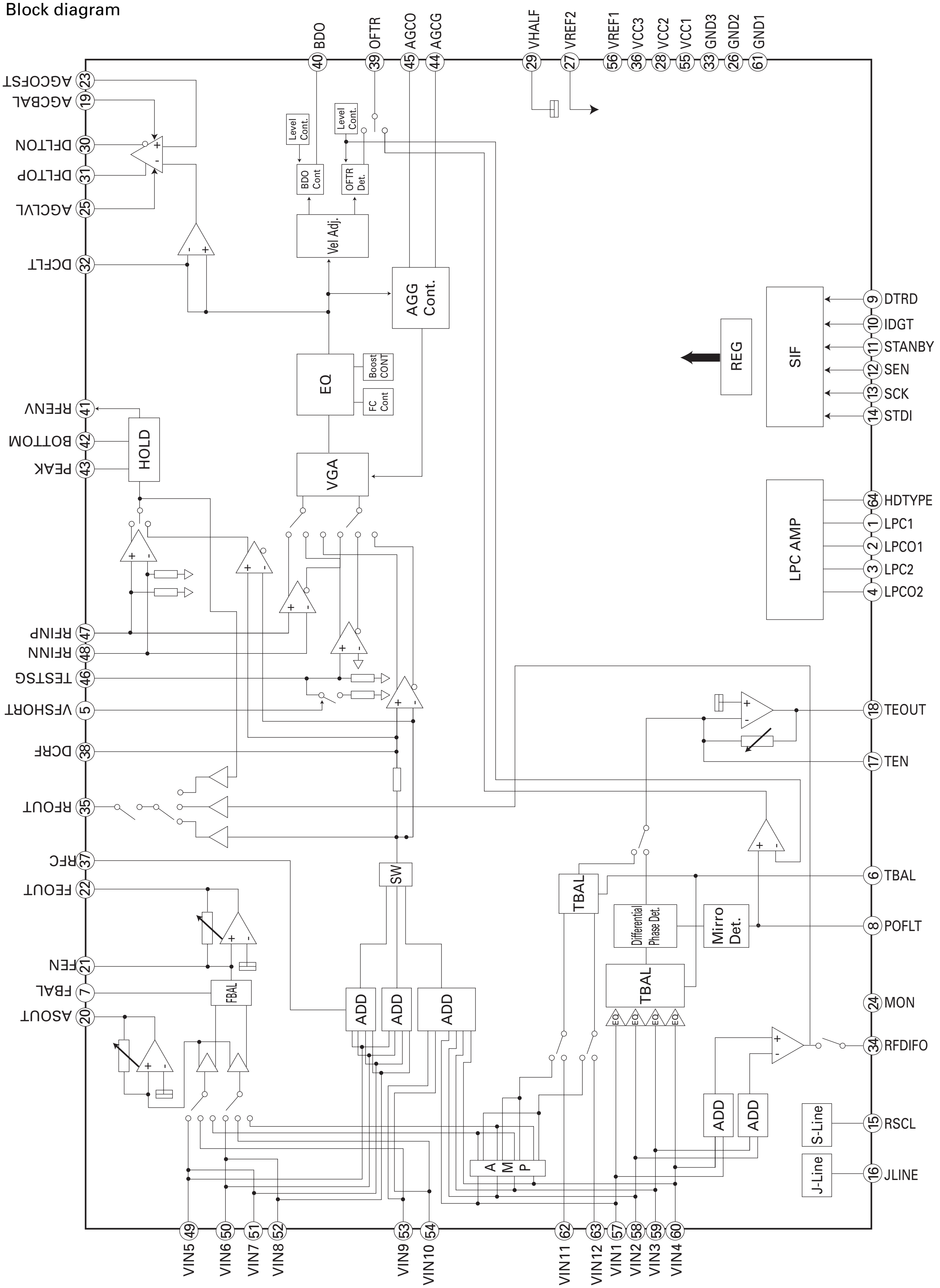

Vdd 1
DQ0 2
VddQ 3
DQ1 4
DQ2 5
VssQ 6
DQ3 7
DQ4 8
VddQ 9
DQ5 10
DQ6 11
VssQ 12
DQ7 13
Vdd 14
DQML 15
$\overline{WE}$ 16
$\overline{CAS}$ 17
$\overline{RAS}$ 18
$\overline{CS}$ 19
BA0(A13) 20
BA1(A12) 21
A10 22
A0 23
A1 24
A2 25
A3 26
Vdd 27
54 Vss
53 DQ15
52 VssQ
51 DQ14
50 DQ13
49 VddQ
48 DQ12
47 DQ11
46 VssQ
45 DQ10
44 DQ9
43 VddQ
42 DQ8
41 Vss
40 NC
39 DQMU
38 CLK
37 CKE
36 NC
35 A11
34 A9
33 A8
32 A7
31 A6
30 A5
29 A4
28 Vss

Pin name	Function
CLK	Master clock
CKE	Clock enable
$\overline{CS}$	Chip select
$\overline{RAS}$	Row address strobe
$\overline{CAS}$	Column address strobe
$\overline{WE}$	Write enable
DQ$_{0-15}$	Data input/output
DQM(U/L)	DQ mask enable(Upper/Lower)
A$_{0-11}$	Address input
BA0, 1	Bank address
V$_{DD}$	Power supply
V$_{DD}$Q	Data output power supply
V$_{SS}$	GND
V$_{SS}$Q	Data output GND

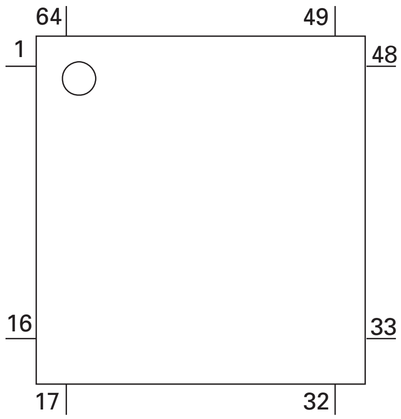
AN8471SAT1


VLP
VM1
BMS
NC
A12
A11
CS1
A22
A21
CS2
A32
A31
FG2
VM2
VDD
GND
32
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17
BRIDGE
x5
PRE-
DRIVER
CSOUT
HIGH PRESS
CIRCUIT
HEAT
PROTECTION
PWMOUT
START/
STOP
DISTRIBUTION
CIRCUIT
SRESET
OSC
DIRECTION
CHANGE
VT
HALL
AMP
MATRIX
VCT
HALL
BIAS
LOGIC CIRCUIT
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
VHB
H3L
H3H
H2L
H2H
H1L
H1H
EC
ECR
FG1
START
VPUMP
BC1
BC2
BC3
BC4

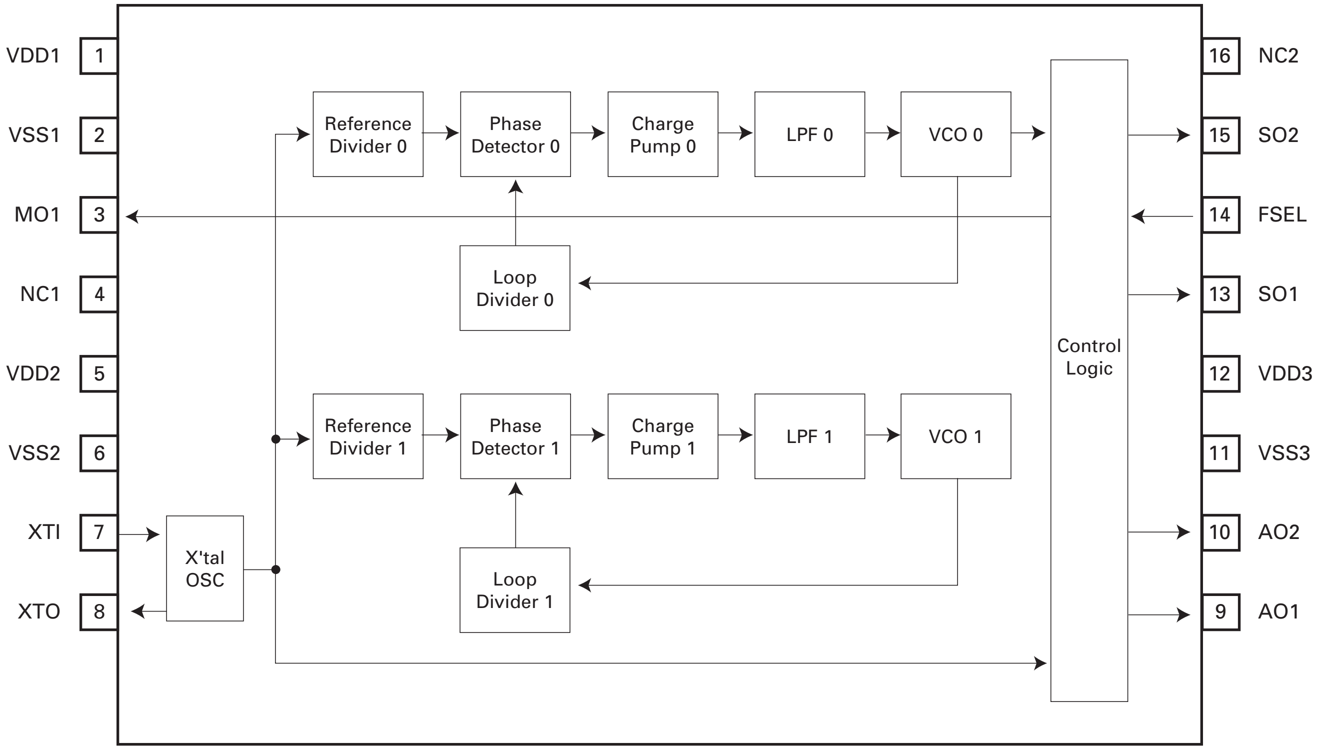
Block diagram


40 BDO
39 OFTR
45 AGCO
44 AGCG
29 VHALF
27 VREF2
56 VREF1
36 VCC3
28 VCC2
55 VCC1
33 GND3
26 GND2
61 GND1
23 AGCOFST
19 AGCBAL
30 DFLTON
31 DFLTOP
25 AGCLVL
32 DCFLT
41 RFENV
42 BOTTOM
43 PEAK
47 RFINP
48 RFINN
46 TESTSG
5 VFSHORT
38 DCRF
35 RFOUT
37 RFC
22 FEOUT
21 FEN
7 FBAL
20 ASOUT
Level Cont.
Level Cont.
BDO Cont
OFTR Det.
Vel Adj.
AGG Cont.
EQ
Boost CONT
FC Cont
HOLD
VGA
SW
ADD
ADD
ADD
FBAL
A
M
P
TBAL
Differential Phase Det.
Mirro Det.
TBAL
EQ
EQ
EQ
EQ
ADD
ADD
S-Line
J-Line
REG
SIF
LPC AMP
9 DTRD
10 IDGT
11 STANBY
12 SEN
13 SCK
14 STDI
64 HDTYPE
1 LPC1
2 LPCO1
3 LPC2
4 LPCO2
18 TEOUT
17 TEN
6 TBAL
8 POFLT
24 MON
34 RFDIFO
15 RSCL
16 JLINE
49 VIN5
50 VIN6
51 VIN7
52 VIN8
53 VIN9
54 VIN10
62 VIN11
63 VIN12
57 VIN1
58 VIN2
59 VIN3
60 VIN4

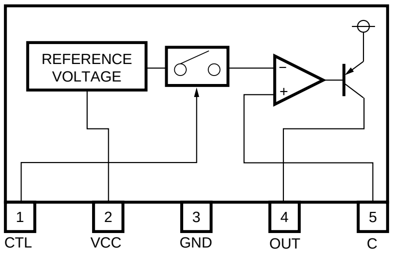
AN8703FH


64
49
1
48
16
33
17
32

SM8707FV


VDD1 1
VSS1 2
MO1 3
NC1 4
VDD2 5
VSS2 6
XTI 7
XTO 8
16 NC2
15 SO2
14 FSEL
13 SO1
12 VDD3
11 VSS3
10 AO2
9 AO1
Reference Divider 0
Phase Detector 0
Charge Pump 0
LPF 0
VCO 0
Loop Divider 0
Reference Divider 1
Phase Detector 1
Charge Pump 1
LPF 1
VCO 1
Loop Divider 1
X'tal OSC
Control Logic

BA00ASFP


REFERENCE VOLTAGE
-
+
1 CTL
2 VCC
3 GND
4 OUT
5 C

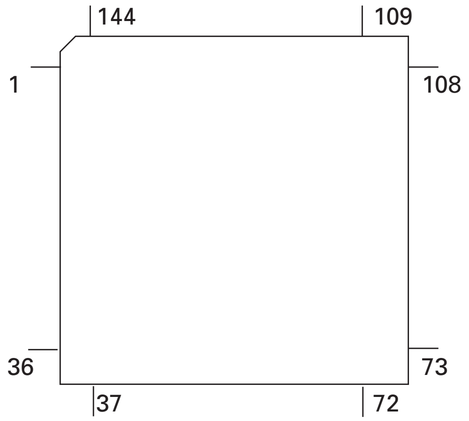
● Pin Function(PE5347A:EW,PE5348A:UC,RC,RD)

Pin No.	Pin Name	I/O	Function and operation
1-4	NC	I	Not used
5	PORTGND0		Port GND
6	ROMCS	O	ROM Chip select output
7	ROMCLK	O	ROM Clock output
8	ROMDATA	I/O	ROM Data Input Output
9	VDT	O	EVOL Data output
10	VCK	O	EVOL Clock output
11	EMUTE	O	EVOL Mute output
12	VST	O	EVOL Strobe output
13	MTRPW	O	FLAP Motor power supply control output
14	MTRSEL	O	FLAP motor control output
15	MTRS	O	FLAP Motor speed contorl
16	MTR1	O	FLAP angle motor control signal
17	MTR2	O	FLAP position motor control signal
18	SNSPW	O	FLAP sense power supply output
19	PUSHSW	I	FLAP push switch input
20	DEG0SW	I	FLAP monitor angle 0 sense input
21	LIFTPUL	I	FLAP lift pulse input
22	PORTVDD0		Port power supply
23	RDT	I	RDS data input (EW model)
24	$\overline{\mathrm{RDS57K}}$	I	RDS 57KHz input (EW model)
25	$\overline{\mathrm{RDSLK}}$	I	RDS signal input (EW model)
26	RECIVE	O	RDS receive
27	REARPW	O	Rear key output
28	REAROUT	O	Rear output
29	ACCPW	O	ACC power control output
30	SRCPW	O	Source power control output
31	SYSPW	O	System power control output
32	VPW	O	Video power control output
33	DDCCNTL	O	DD converter output
34	DLED	O	LED output
35	ILMPW	O	Illumination power output
36	PCL	O	System clock ouptut
37	GND0		GND
38	CPUREG		Regulator output
39	VDD0		Power supply(/RESET)
40	$\overline{\mathrm{RESET}}$		Reset
41	VPP		Vpp
42	TSI	I	Test data input
43	NC	O	Not used
44	TCK	I	Test data clock input
45	$\overline{\mathrm{LDET}}$	I	RDS PLL signal (EW model)
46	TUNPDI	I	TUNER PLL data input
47	TUNPDO	I/O	TUNER PLL data output
48	TUNPCK	I/O	TUNER PLL clock output
49	TUNPW	O	Tuner power control output
50	MACHMUTE	O	RCA REAR/SW mute output
51	VSELIN1	I	VSEL input
52	VSELIN2	I	VSEL input
53	AVONIN	I	AV-BUS AV video input sense
54	ROT0	I	Rotary encoder input
55	ROT1	I	Rotary encoder input
56	TESTIN	I	Test mode input
57	$\overline{\mathrm{RCK}}$	I	RDS data clock (EW model)
58	PRGON	I	System microcomputer program mode
59	VPPON	O	VPP ON/OFF
60	PORTVDD1	O	Port power supply

Pin No.	Pin Name	I/O	Function and operation
61	PRGSW	I	System/PRG switch
62	PRGRST	O	Display reset output
63-66	NC	O	Not used
67	ILMD	O	Dual illumination output (EW model)
68	PEE	O	PEE output
69	$\overline{\text{BSENS}}$	I	Back up sense input
70	XT2		Sub clock oscillator connect
71	XT1		Sub clock oscillator connect
72	GND2		GND
73	X1		Main clock oscillator connect
74	X2		Main clock oscillator connect
75-83	NC		Not used
84	SDA	I/O	AV selector data output
85	SELMUTE	O	AV selector sound mute output
86	SCL	O	AV selector clock output
87	ASENBO	O	Slave ACC sense output
88	IPPW	O	IPBUS driver power supply contorl output
89	NC		Not used
90	$\overline{\text{IERX}}$	I	IPBUS data input
91	$\overline{\text{IETX}}$	O	IPBUS data output
92	PORTGND1		Port GND
93-95	NC	O	Not used
96	$\overline{\text{ASENS}}$	I	ACC sense input
97-99	NC		Not used
100	TUNPCE	O	TUNER PLL chip enable output
101	$\overline{\text{TUNPCE2}}$	O	TUNER PLL chip enable output 2
102	PORTVDD2		Port power supply
103	CONTVDD	O	MS3 digital power control output
104	CONTVD8	O	MS3 motor power control output
105	DREM	O	NAVI Reboot remote control output
106	REMUTE	O	NAVI remote control mute output
107	RXMOM	I	Display microcomputer data input
108	TXMON	O	Display microcomputer data output
109	SWVDD	O	Display microcomputer power supply output
110	NC	O	Not used
111	RXMS3	I	MS3 data input
112	TXMS3	O	MS3 data output
113	IRQPWR	O	MS3 backup power output
114	$\overline{\text{XRESET}}$	O	MS3 mechanism CPU reset
115	AMUTE	I	MS3 mute input
116	NC	O	Not used
117	RXNAV	I	NAVI data input
118	TXNAV	O	NAVI command output
119	$\overline{\text{RGBARI}}$	I	RGB navigation ON sense input
120	NC		Not used
121	NAVMUTE	O	Navigation guide mute output
122	MUTE	O	Mute output
123	REARMUTE	O	Rear monitor mute output
124	AMPMUTE	O	AMP mute output
125	NC	O	Not used
126	$\overline{\text{ISENS}}$	I	Illumination sense input
127	TELIN	I	TEL mute input
128	VDD1		Power supply
129	PBSENS	I	Packing brake sense input
130	BGSENS	I	Back gear sense input

Pin No.	Pin Name	I/O	Function and operation
131	GND1		GND
132	$\overline{\text{DSENS}}$	I	Detach sense
133,134	NC		Not used
135	TUNSL	I	TUNER signal level input
136	VD8SENS	I	VD8 sense
137	ANGLEIN	I	Mechanism volume for angle sense
138,139	NC	I	Not used
140-142	KEYDTA0-2	I	Key data input
143	ADCVDD		A/D Power supply
144	ADCGND		A/D GND

*PE5347A : EW,PE5348A : UC,RC,RD



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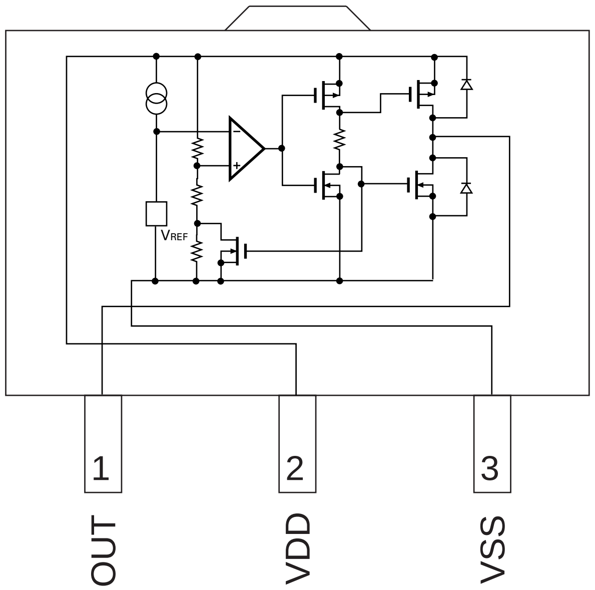
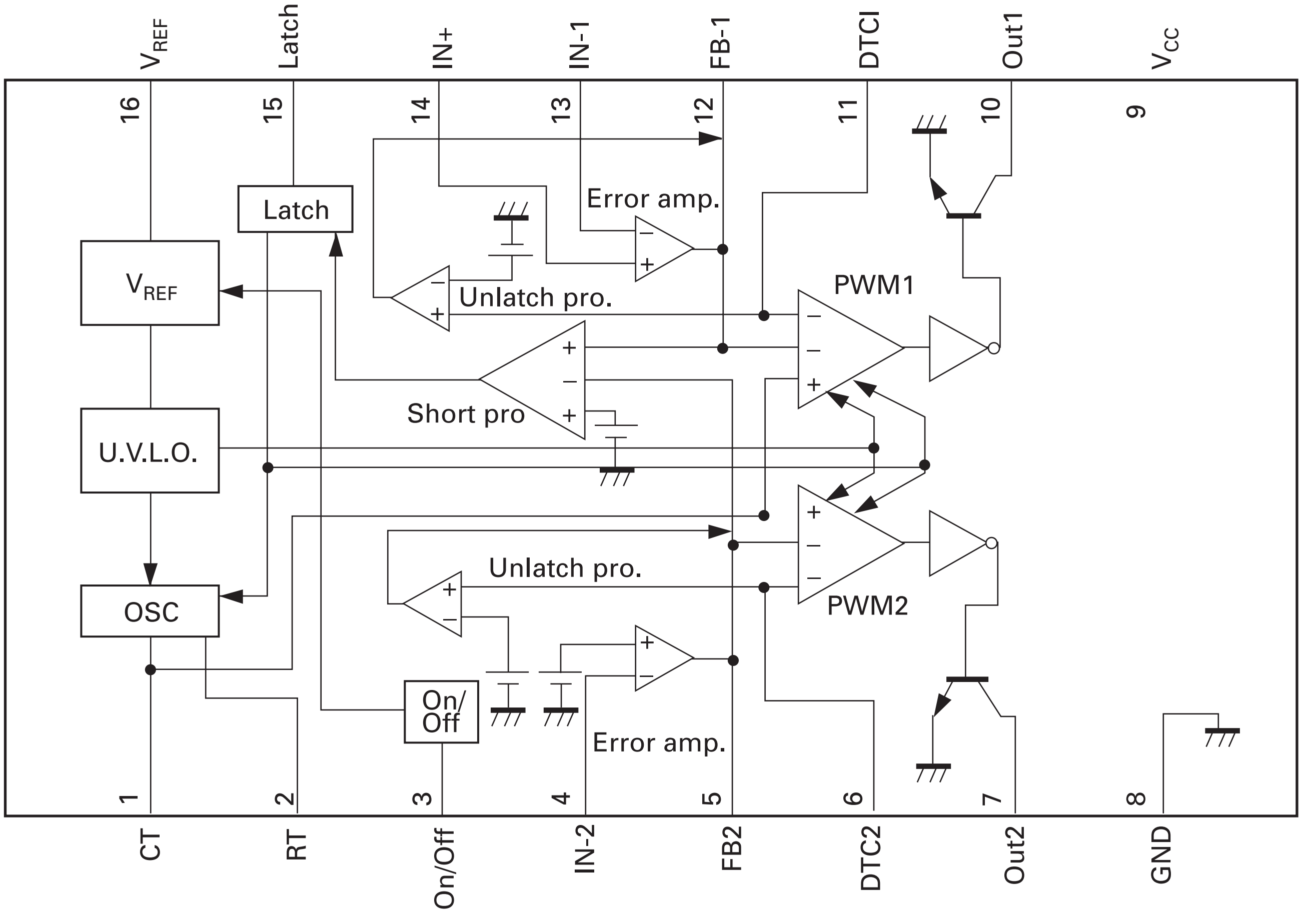
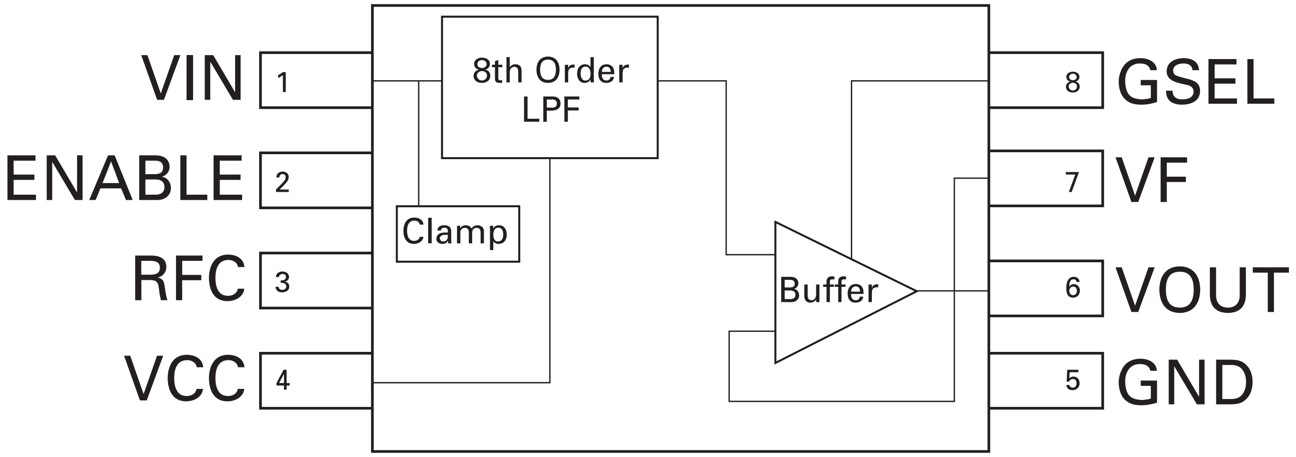


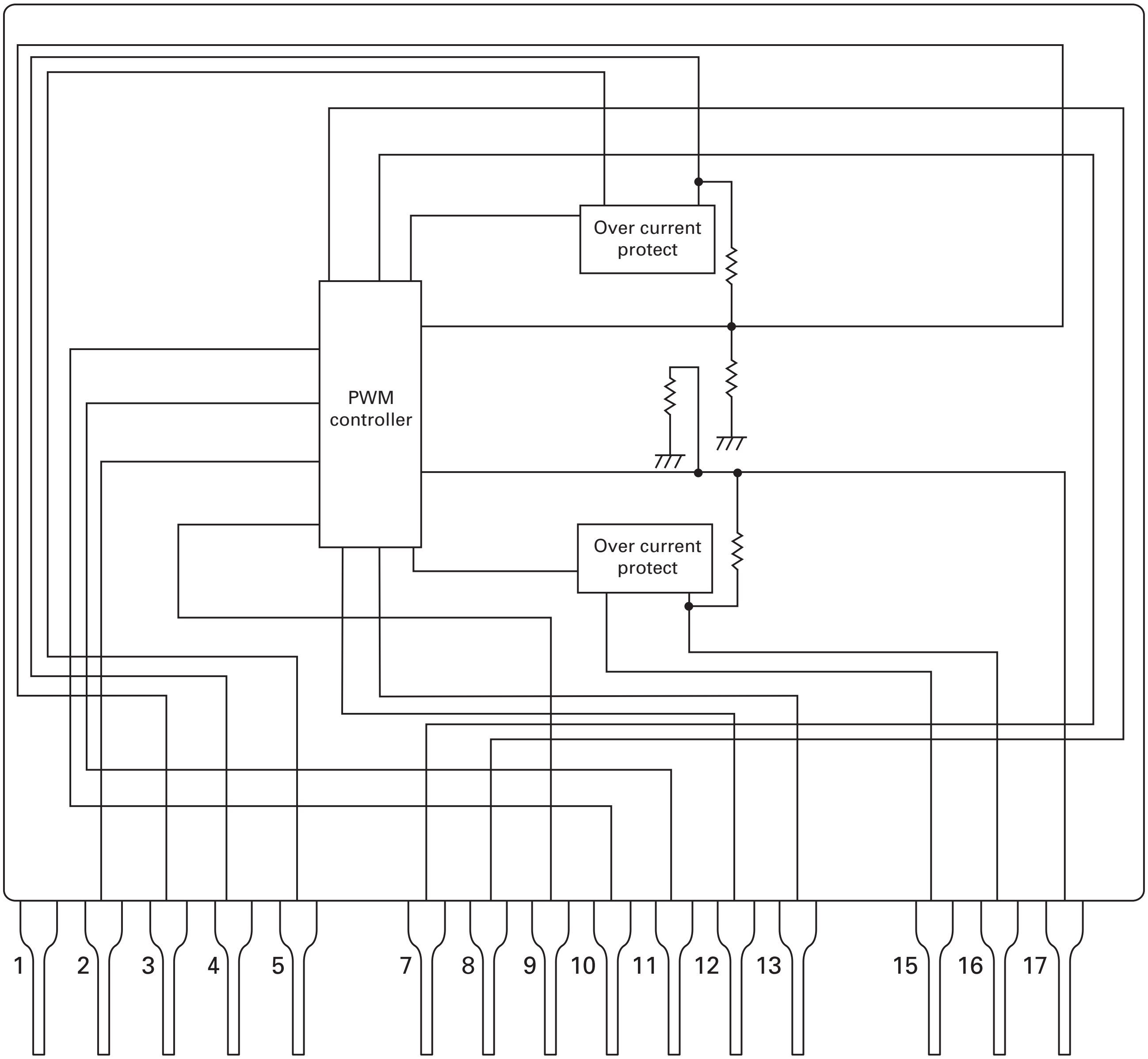
AN8011S


VREF
Latch
IN+
IN-1
FB-1
DTCI
Out1
VCC
16
15
14
13
12
11
10
9
Latch
Error amp.
VREF
Unlatch pro.
PWM1
Short pro
U.V.L.O.
Unlatch pro.
PWM2
OSC
On/
Off
Error amp.
1
2
3
4
5
6
7
8
CT
RT
On/Off
IN-2
FB2
DTC2
Out2
GND

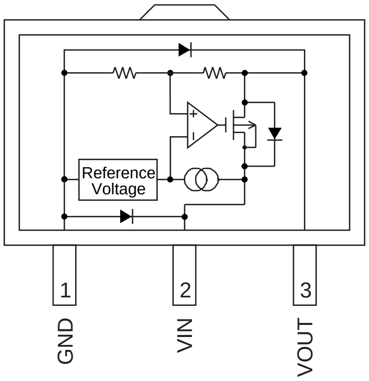
SM5304AV


VIN
ENABLE
RFC
VCC
1
2
3
4
8th Order
LPF
Clamp
Buffer
8
7
6
5
GSEL
VF
VOUT
GND

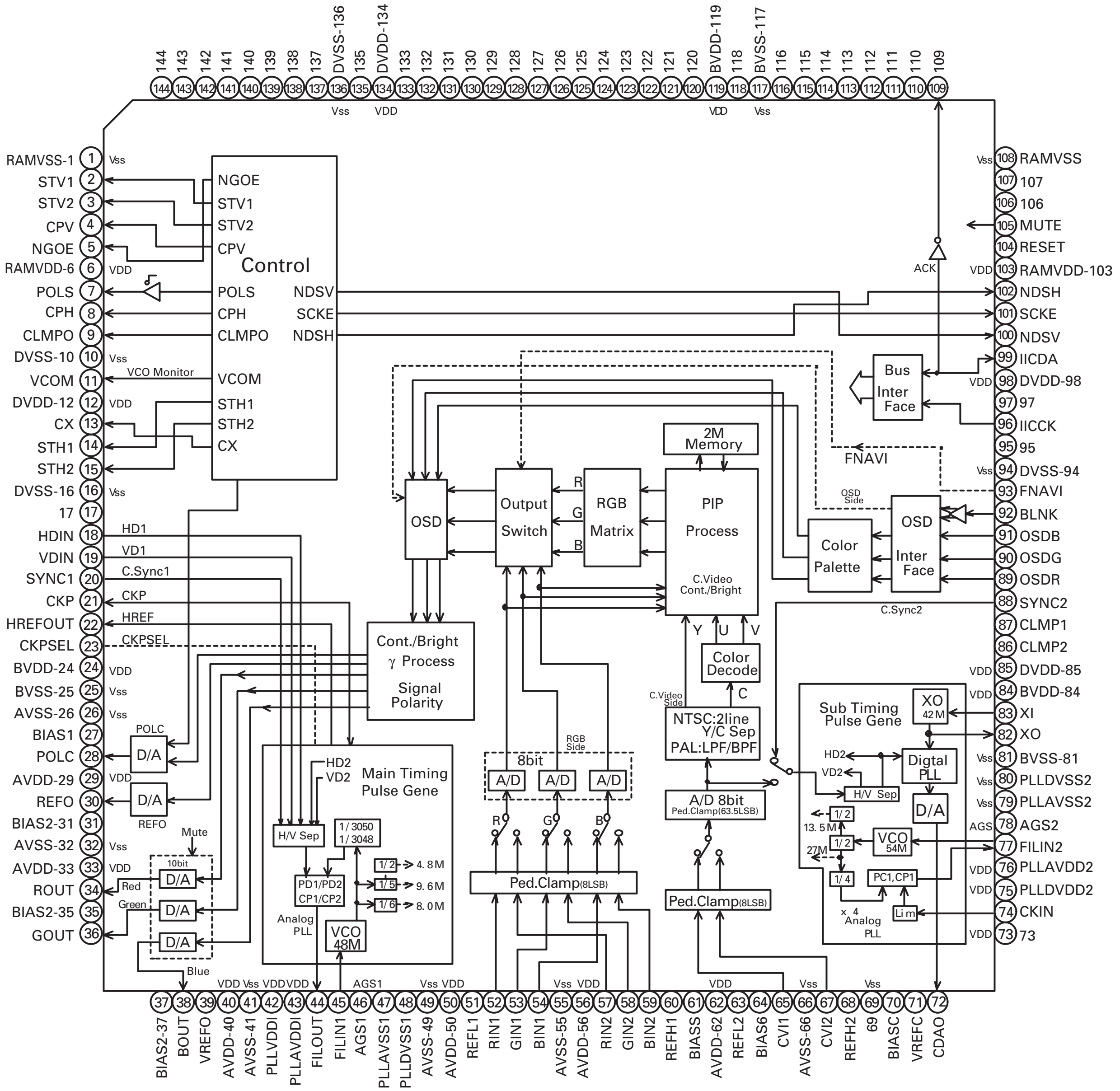
BP5451


Over current protect
PWM controller
Over current protect
1
2
3
4
5
7
8
9
10
11
12
13
15
16
17

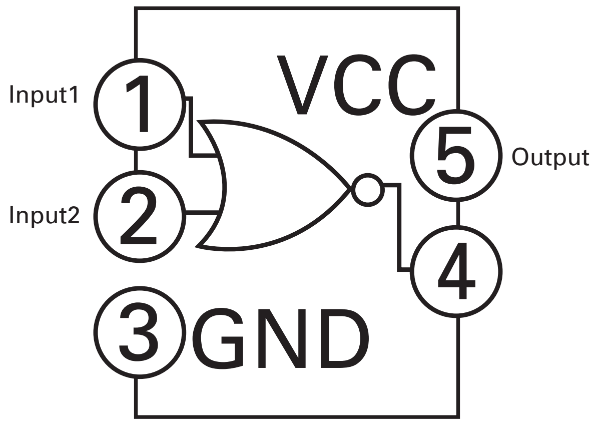
*S-812C50AUA-C3E


Reference Voltage
+
-
1
2
3
GND
VIN
VOUT

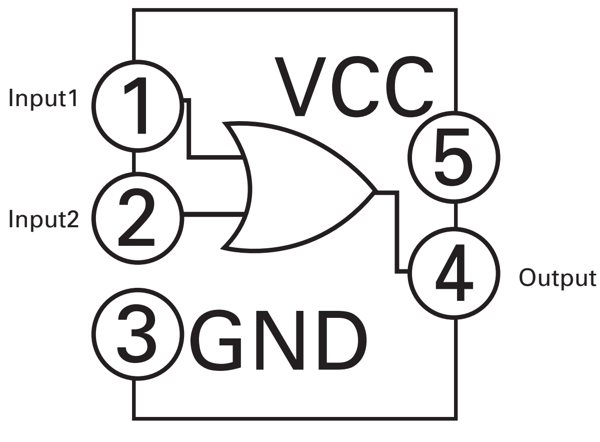
*TC90A64AF-P


144 143 142 141 140 139 138 137 DVSS-136 135 DVDD-134 133 132 131 130 129 128 127 126 125 124 123 122 121 120 BVDD-119 118 BVSS-117 116 115 114 113 112 111 110 109
Vss
VDD
VDD
Vss
RAMVSS-1 1 Vss
STV1 2
STV2 3
CPV 4
NGOE 5
RAMVDD-6 6 VDD
POLS 7
CPH 8
CLMPO 9
DVSS-10 10 Vss
VCOM 11
VCO Monitor
DVDD-12 12 VDD
CX 13
STH1 14
STH2 15
DVSS-16 16 Vss
17 17
HDIN 18 HD1
VDIN 19 VD1
SYNC1 20 C.Sync1
CKP 21 CKP
HREFOUT 22 HREF
CKPSEL 23 CKPSEL
BVDD-24 24 VDD
BVSS-25 25 Vss
AVSS-26 26 Vss
BIAS1 27
POLC 28
AVDD-29 29 VDD
REFO 30
BIAS2-31 31
AVSS-32 32 Vss
AVDD-33 33 VDD
ROUT 34
BIAS2-35 35
GOUT 36
Control
NGOE
STV1
STV2
CPV
POLS
CPH
CLMPO
NDSV
SCKE
NDSH
VCOM
STH1
STH2
CX
POLC
D/A
D/A
REFO
Mute
10bit
D/A
Red
Green
D/A
D/A
Blue
Cont./Bright
γ Process
Signal
Polarity
HD2
VD2
Main Timing
Pulse Gene
H/V Sep
1 / 3050
1 / 3048
1/2 4. 8M
1/5 9. 6M
1/6 8. 0M
PD1/PD2
CP1/CP2
Analog
PLL
VCO
48M
OSD
Output
Switch
R
G
B
RGB
Matrix
2M
Memory
PIP
Process
C.Video
Cont./Bright
Y U V
Color
Decode
C
C.Video
Side
NTSC:2line
Y/C Sep
PAL:LPF/BPF
A/D 8bit
Ped.Clamp(63.5LSB)
Ped.Clamp(8LSB)
RGB
Side
8bit
A/D A/D A/D
R G B
Ped.Clamp(8LSB)
Bus
Inter
Face
ACK
FNAVI
OSD
Side
OSD
Inter
Face
Color
Palette
C.Sync2
Sub Timing
Pulse Gene
XO
42M
Digtal
PLL
HD2
VD2
H/V Sep
1/2
13. 5M
1/2
27M
VCO
54M
D/A
1/4
PC1,CP1
x 4
Analog
PLL
Lim
Vss 108 RAMVSS
107 107
106 106
105 MUTE
104 RESET
VDD 103 RAMVDD-103
102 NDSH
101 SCKE
100 NDSV
99 IICDA
VDD 98 DVDD-98
97 97
96 IICCK
95 95
Vss 94 DVSS-94
93 FNAVI
92 BLNK
91 OSDB
90 OSDG
89 OSDR
88 SYNC2
87 CLMP1
86 CLMP2
VDD 85 DVDD-85
VDD 84 BVDD-84
83 XI
82 XO
Vss 81 BVSS-81
Vss 80 PLLDVSS2
Vss 79 PLLAVSS2
AGS 78 AGS2
77 FILIN2
VDD 76 PLLAVDD2
VDD 75 PLLDVDD2
74 CKIN
VDD 73 73
VDD Vss VDD VDD
AGS1
Vss VDD
Vss VDD
VDD
Vss
Vss
37 BIAS2-37
38 BOUT
39 VREFO
40 AVDD-40
41 AVSS-41
42 PLLVDDI
43 PLLAVDDI
44 FILOUT
45 FILIN1
46 AGS1
47 PLLAVSS1
48 PLLDVSS1
49 AVSS-49
50 AVDD-50
51 REFL1
52 RIN1
53 GIN1
54 BIN1
55 AVSS-55
56 AVDD-56
57 RIN2
58 GIN2
59 BIN2
60 REFH1
61 BIASS
62 AVDD-62
63 REFL2
64 BIAS6
65 CVI1
66 AVSS-66
67 CVI2
68 REFH2
69 69
70 BIASC
71 VREFC
72 CDAO

*TC7SZ02FU


Input1
1
Input2
2
3
GND
VCC
5
Output
4

*TC7SZ32FU

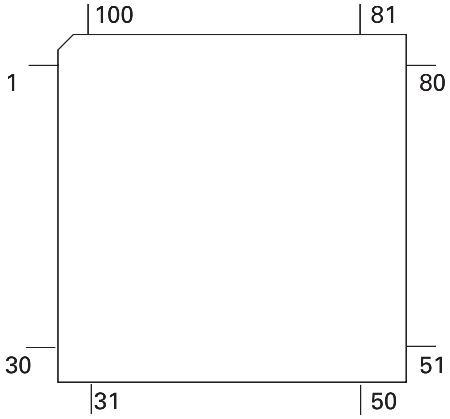

Input1
1
Input2
2
3
GND
VCC
5
4
Output

● Pin Function(PD5842A)

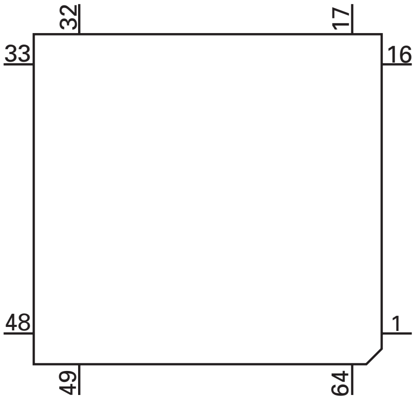
Pin No.	Pin Name	I/O	Function and operation
1-2	NC		Not used
3	LKYDT	I	Data input from LCD micro computer
4	LDPDT	O	Data output to LCD micro computer
5-7	NC		Not used
8	BYTE	I	Outside data select
9	CNVss	I	Mode select
10	VDDSENS	I	Power supply sense
11	5060IN	I	50/60Hz input port
12	RESET	I	Reset input
13	Xout		Oscillation pin
14	Vss		GND
15	Xin		Oscillation pin
16	Vcc		Power supply
17	OSDCLK	I	OSD clock input
18	NC		Not used
19	YSSTOP	O	NAVI overwrite permission/prohibition
20	OSDTOP	O	OSD/NAVI overwrite select
21	OSDBLNK	O	OSD blanking output
22	NC		Not used
23	MUTE	O	Mute output two pictures IC
24	DIMDTY	O	Dimmer pulse output
25	NC		Not used
26	INVPUL	O	Inverter pulse output
27	ICRES	O	IC reset output
28	SCL	I/O	IC clock output
29-30	NC		Not used
31	SDA	I/O	IC data input/output
32	OSDR	O	OSD analog R output
33	OSDG	O	OSD analog G output
34	OSDB	O	OSD analog B output
35	KYDT	O	Data output for test mode/Data output to system micro computer
36	DPDT	I	Data input for test mode/Data input from system micro computer
37	TSCK	I	Clock input for test mode
38	EPRDI	I	Memory for adjustment data input
39	EPRDO	O	Memory for adjustment data output
40	EPRPROT	O	Memory for adjustment protect output
41	EPRCS	O	Memory for adjustment chip select output
42	EPRCK	O	Memory for adjustment clock output
43	TESTIN	I	Test input
44-49	NC		Not used
50	5060OUT	O	50/60Hz output port
51-61	NC		Not used
62	HSYNC	I	HSYNC input
63	NC		Not used
64	VSYNC	I	VSYNC input
65-74	NC		Not used
75	STEST2		Touch panel test mode input
76	AV_RVS	O	L-R reversal change for video output
77	SELF_RST	I	Reset input for self rewrite
78	LSWVDD	O	LCD micro computer power supply control output
79	LBKL	O	LCD micro computer back light power supply control output
80	LDIMMER	O	LCD dimmer output
81	MFLPW	O	Back light control output
82	MVIPW	O	Picture control output
83	ROMCS	O	ROM chip select output
84	ROMCK	O	ROM clock output
85	ROMDATA	I	ROM data input
86	EPRRST	I	Memory for adjustment fast mode input
87	STEST1	I	Monitor operation mode input
88	EPRTEST	I	Memory for adjustment select mode input
89	NC		Not used
90	PNLYV	O	Hi output is carried out when Y directions is detected

Pin No.	Pin Name	I/O	Function and operation
91	PNLXV	O	Hi output is carried out when X directions is detected
92	PNLADY	I	Y directions analog input
93	PNLADX	I	X directions analog input
94	LSEN	I	Lens sense input
95-96	NC		Not used
97	CVIN2	I	Not used
98	TVSETB	I	Micro computer test pin
99	VCCE		Power supply
100	CVIN1	I	Not used

*PD5842A



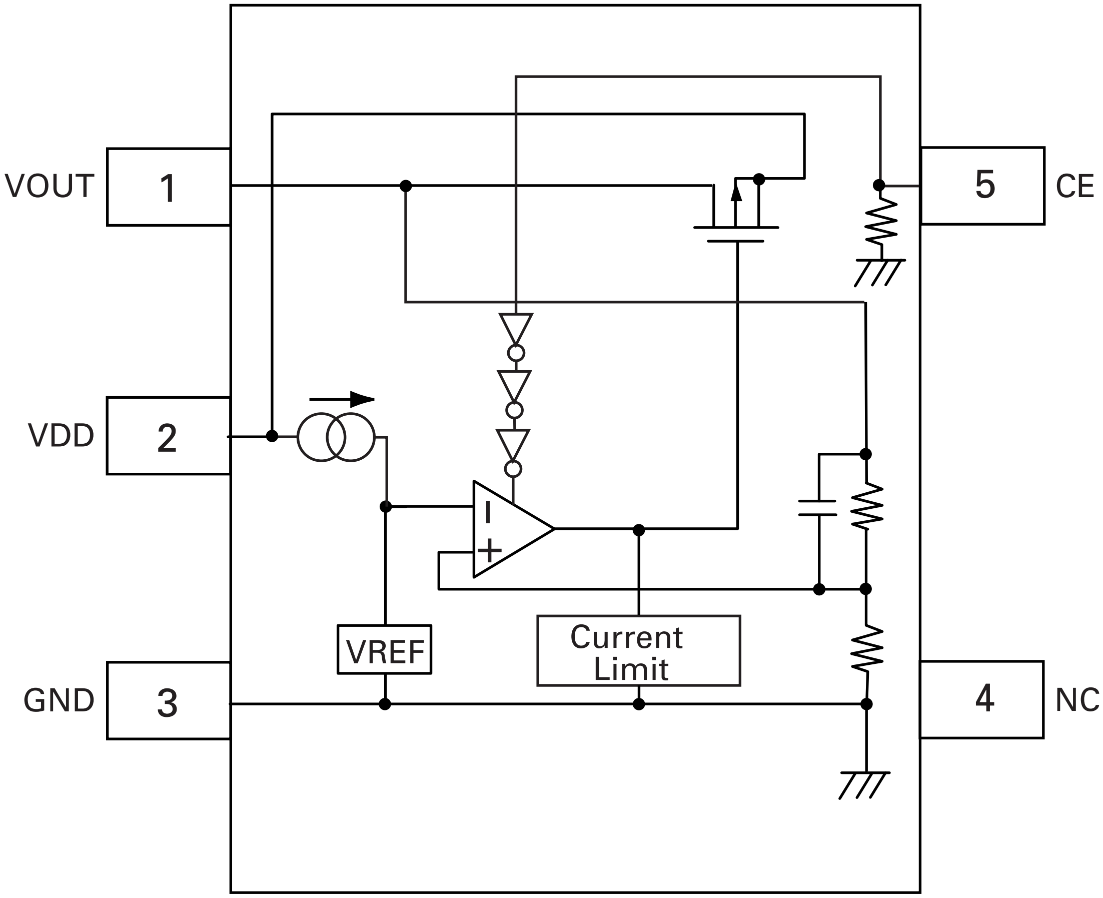
*PD6340A



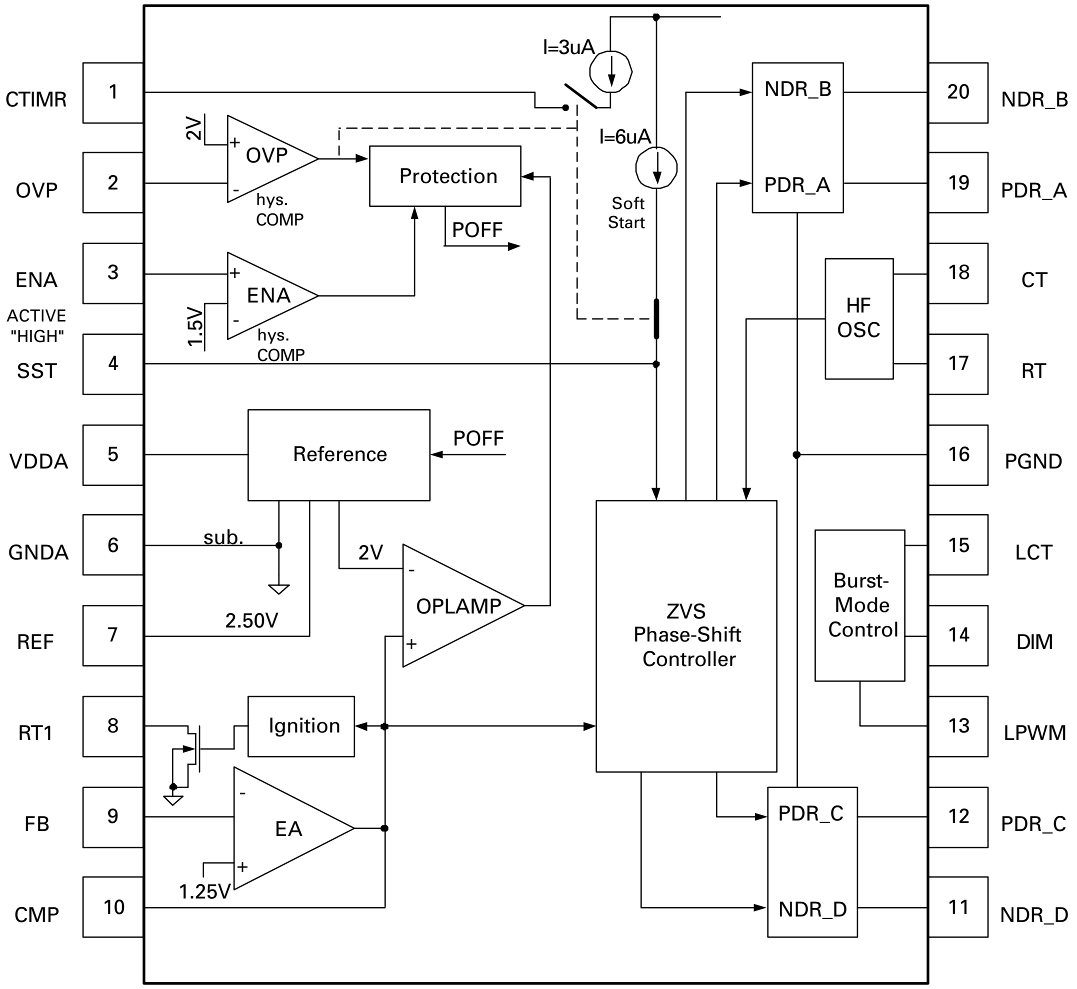
● Pin Functions (PD6340A)

Pin No.	Pin Name	I/O	Function and Operation
1-5	SEG5-1	O	LCD segment output
6-9	COM4-1	O	LCD common output
10	VLCD		LCD drive power supply
11-14	KST4-1	O	Key strobe output
15,16	KDT1,2	I	Key data input (analogue input)
17	REM	I	Remote control reception input
18	DPDT	I	Display data input
19	NC		Not used
20	KYDT	O	Key data output
21	MODA		GND
22	X0		Crystal oscillator connection pin
23	X1		Crystal oscillator connection pin
24	VSS		GND
25,26	KDT3,4	I	Key data input
27	NC		Not used
28	NC	O	Not used
29-32	NC		Not used
33-55	SEG40-14	O	LCD segment output
56	VDD		Power supply
57-64	SEG13-4	O	LCD segment output

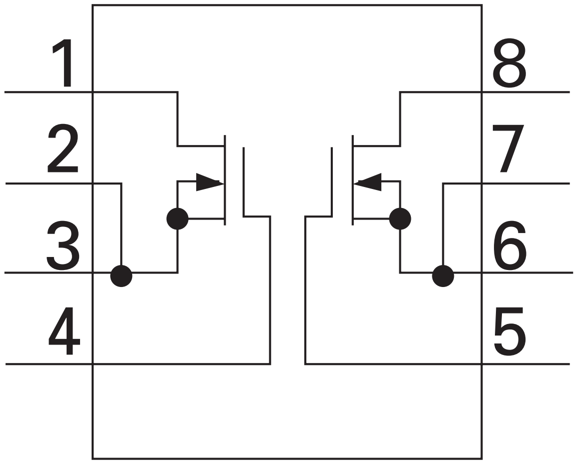
R1130H251B


VOUT
1
VDD
2
GND
3
VREF
Current Limit
5
CE
4
NC

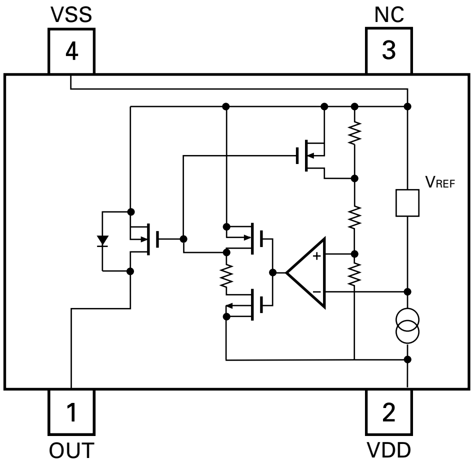
0Z961IS


CTIMR
1
OVP
2
ENA
3
ACTIVE "HIGH"
SST
4
VDDA
5
GNDA
6
REF
7
RT1
8
FB
9
CMP
10
20
NDR_B
19
PDR_A
18
CT
17
RT
16
PGND
15
LCT
14
DIM
13
LPWM
12
PDR_C
11
NDR_D
I=3uA
I=6uA
Soft Start
2V
OVP
hys. COMP
Protection
POFF
ENA
1.5V
hys. COMP
Reference
POFF
sub.
2.50V
2V
OPLAMP
Ignition
EA
1.25V
NDR_B
PDR_A
HF OSC
ZVS Phase-Shift Controller
Burst-Mode Control
PDR_C
NDR_D

SI6544DQ

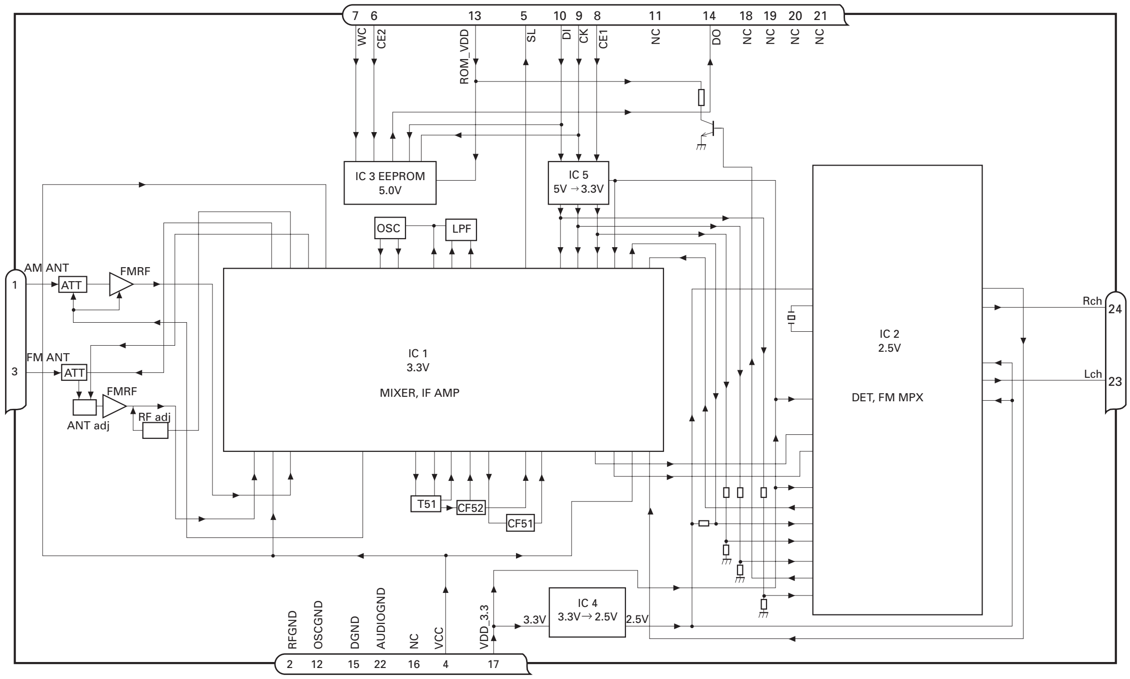


*S-80827CNNB-B8M


VSS
4
NC
3
VREF
1
OUT
2
VDD

● UC,RC,RD model

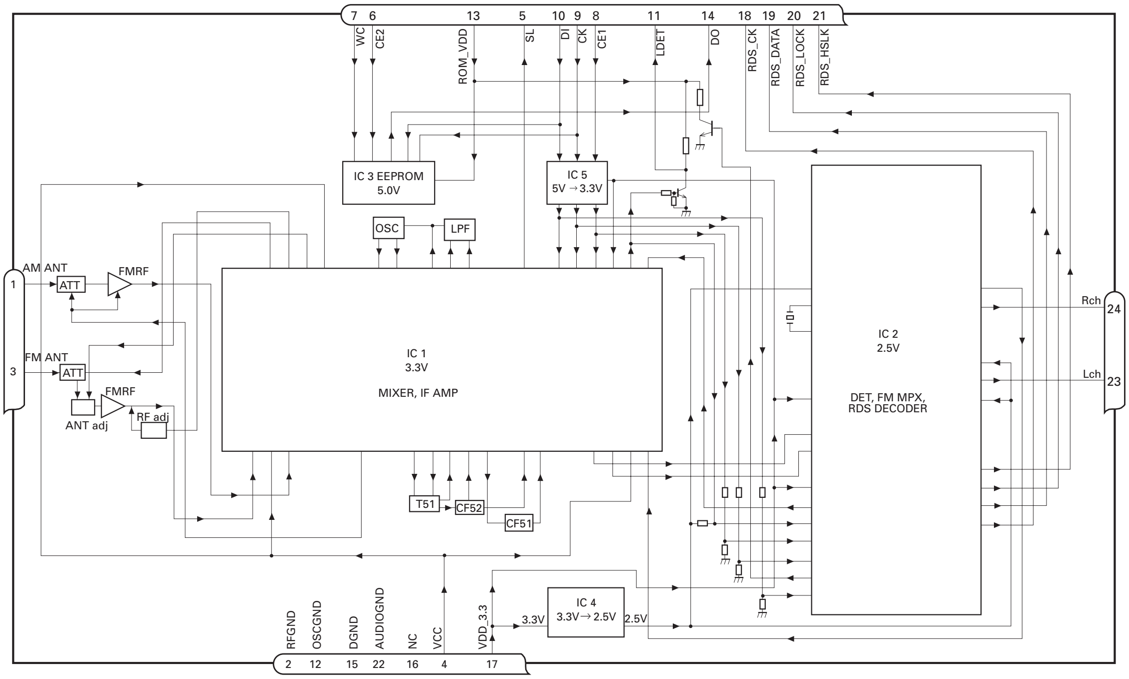
● FM/AM Tuner Unit


7 6 13 5 10 9 8 11 14 18 19 20 21
WC
CE2
ROM_VDD
SL
DI
CK
CE1
NC
DO
NC
NC
NC
NC
IC 3 EEPROM
5.0V
IC 5
5V → 3.3V
OSC
LPF
AM ANT
FMRF
1
ATT
FM ANT
3
ATT
FMRF
ANT adj
RF adj
IC 1
3.3V
MIXER, IF AMP
IC 2
2.5V
DET, FM MPX
Rch
24
Lch
23
T51
CF52
CF51
IC 4
3.3V → 2.5V
3.3V
2.5V
RFGND
OSCGND
DGND
AUDIOGND
NC
VCC
VDD_3.3
2 12 15 22 16 4 17

No.	Symbol	I/O	Explain	
1	AMANT	I	AM antenna input	AM antenna input high impedance AMANT pin is connected with an all antenna by way of 4.7µH. (LAU type inductor) A series circuit including an inductor and a resistor is connected with RF ground for the countermeasure against the ham of power transmission line.
2	RFGND		RF ground	Ground of antenna block
3	FMANT	I	FM antenna input	Input of FM antenna 75Ω Surge absorber(DSP-201M-S00B) is necessary.
4	VCC		power supply	The power supply for analog block. D.C 8.4V ± 0.3V
5	SL	O	signal level	Output of FM/AM signals level
6	CE2	I	chip enable-2	Chip enable for EEPROM ”Low” active
7	WC	I	write control	You can write EEPROM, when EEPROM write control is “Low”. Ordinary non connection
8	CE1	I	chip enable-1	Chip enable for AF•RF ”High” active
9	CK	I	clock	Clock
10	DI	I	data in	Data input
11	NC		non connection	Not used
12	OSCGND		osc ground	Ground of oscillator block
13	ROM_VDD		power supply	Power supply for EEPROM pin 13 is connected with a power supply of micro computer.
14	DO	O	data out	Data output
15	DGND		digital ground	Ground of digital block
16	NC		non connection	Not used
17	VDD_3.3		power supply	The power supply for digital block. 3.3V ± 0.2V
18	NC		non connection	Not used
19	NC		non connection	Not used
20	NC		non connection	Not used
21	NC		non connection	Not used
22	AUDIOGND		audio ground	Ground of audio block
23	L ch	O	L channel output	FM stereo “L-ch” signal output or AM audio output
24	R ch	O	R channel output	FM stereo “R-ch” signal output or AM audio output

● EW model

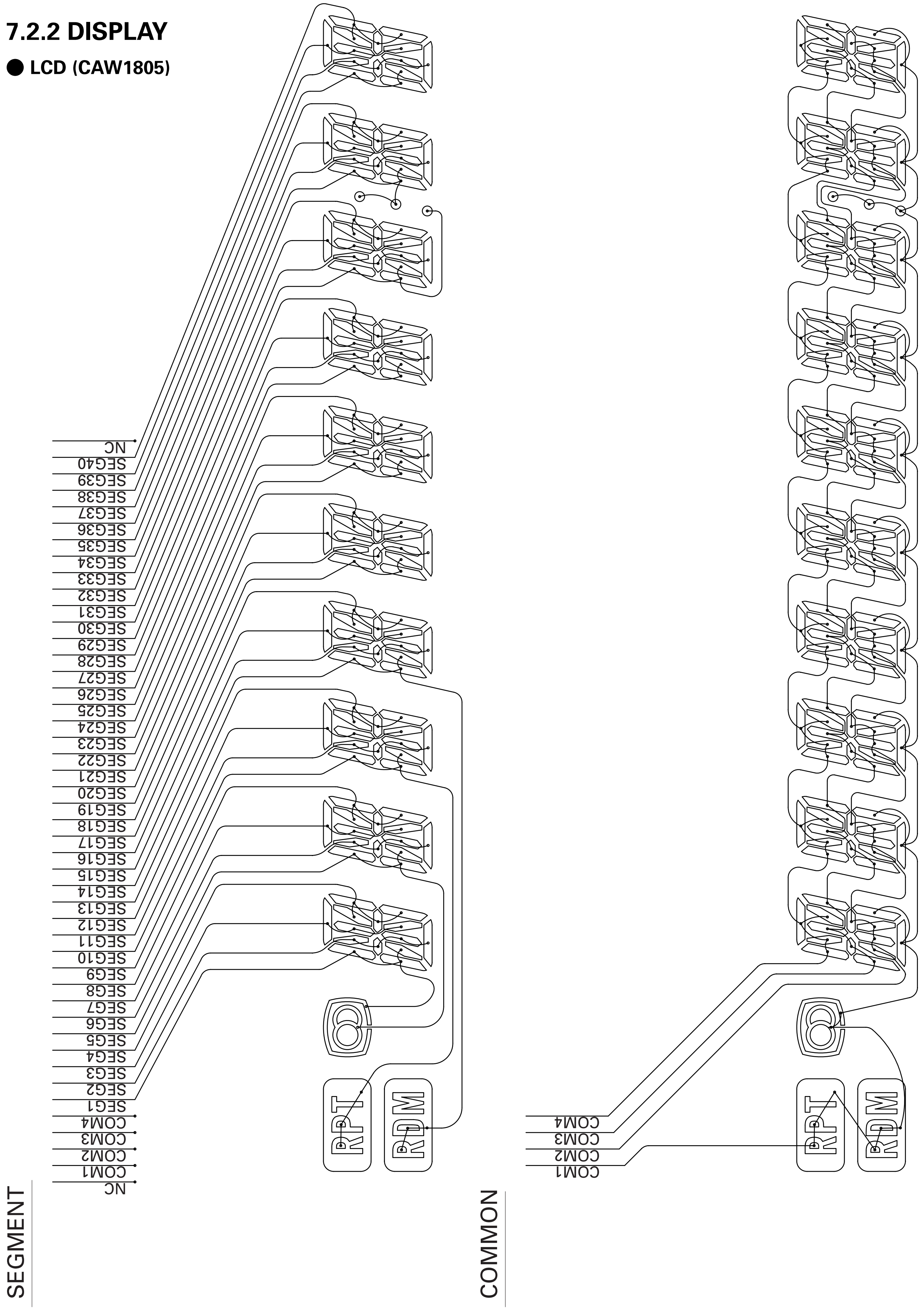
● FM/AM Tuner Unit


7
6
13
5
10
9
8
11
14
18
19
20
21
WC
CE2
ROM_VDD
SL
DI
CK
CE1
LDET
DO
RDS_CK
RDS_DATA
RDS_LOCK
RDS_HSLK
IC 3 EEPROM
5.0V
IC 5
5V → 3.3V
OSC
LPF
AM ANT
1
ATT
FMRF
FM ANT
3
ATT
FMRF
ANT adj
RF adj
IC 1
3.3V
MIXER, IF AMP
IC 2
2.5V
DET, FM MPX,
RDS DECODER
Rch
24
Lch
23
T51
CF52
CF51
IC 4
3.3V → 2.5V
3.3V
2.5V
RFGND
OSCGND
DGND
AUDIOGND
NC
VCC
VDD_3.3
2
12
15
22
16
4
17

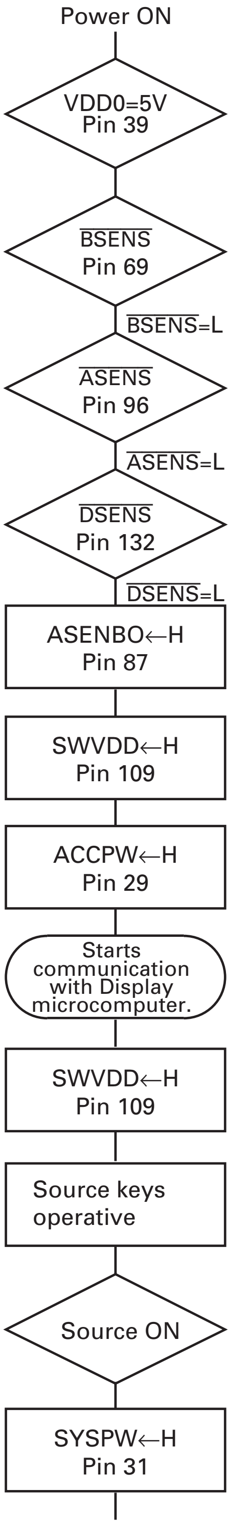
No.	Symbol	I/O	Explain	
1	AMANT	I	AM antenna input	AM antenna input high impedance AMANT pin is connected with an all antenna by way of 4.7µH. (LAU type inductor) A series circuit including an inductor and a resistor is connected with RF ground for the countermeasure against the ham of power transmission line.
2	RFGND		RF ground	Ground of antenna block
3	FMANT	I	FM antenna input	Input of FM antenna 75Ω Surge absorber(DSP-201M-S00B) is necessary.
4	VCC		power supply	The power supply for analog block. D.C 8.4V ± 0.3V
5	SL	O	signal level	Output of FM/AM signals level
6	CE2	I	chip enable-2	Chip enable for EEPROM "Low" active
7	WC	I	write control	You can write EEPROM, when EEPROM write control is "Low". Ordinary non connection
8	CE1	I	chip enable-1	Chip enable for AF•RF "High" active
9	CK	I	clock	Clock
10	DI	I	data in	Data input
11	LDET	O	lock detector	"Low" active
12	OSCGND		osc ground	Ground of oscillator block
13	ROM_VDD		power supply	Power supply for EEPROM pin 13 is connected with a power supply of micro computer.
14	DO	O	data out	Data output
15	DGND		digital ground	Ground of digital block
16	NC		non connection	Not used
17	VDD_3.3		power supply	The power supply for digital block. 3.3V ± 0.2V
18	RDS_CK	O	RDS clock	Output of RDS clock(2.5V)
19	RDS_DATA	O	RDS data	Output of RDS data(2.5V)
20	RDS_LOCK	O	RDS lock	Output unit "High" active(2.5V) (RDS_LOCK turns over by the external transistor. "Low" active)
21	RDS_HSLK	O	RDS high speed lock	Output unit "High" active(2.5V)(RDS_HSLK turns over by the external transistor. "Low" active)
22	AUDIOGND		audio ground	Ground of audio block
23	L ch	O	L channel output	FM stereo "L-ch" signal output or AM audio output
24	R ch	O	R channel output	FM stereo "R-ch" signal output or AM audio output

7.2.2 DISPLAY

● LCD (CAW1805)


NC
SEG40
SEG39
SEG38
SEG37
SEG36
SEG35
SEG34
SEG33
SEG32
SEG31
SEG30
SEG29
SEG28
SEG27
SEG26
SEG25
SEG24
SEG23
SEG22
SEG21
SEG20
SEG19
SEG18
SEG17
SEG16
SEG15
SEG14
SEG13
SEG12
SEG11
SEG10
SEG9
SEG8
SEG7
SEG6
SEG5
SEG4
SEG3
SEG2
SEG1
COM4
COM3
COM2
COM1
NC
RPT
RDM
SEGMENT
COM4
COM3
COM2
COM1
RPT
RDM
COMMON

7.3 OPERATIONAL FLOW CHART


Power ON
VDD0=5V
Pin 39
$\overline{\text{BSENS}}$
Pin 69
$\overline{\text{BSENS}}$=L
$\overline{\text{ASENS}}$
Pin 96
$\overline{\text{ASENS}}$=L
$\overline{\text{DSENS}}$
Pin 132
$\overline{\text{DSENS}}$=L
ASENBO←H
Pin 87
SWVDD←H
Pin 109
ACCPW←H
Pin 29
Starts communication with Display microcomputer.
SWVDD←H
Pin 109
Source keys operative
Source ON
SYSPW←H
Pin 31

Completes power-on operation.
(After that, proceed to each source operation)

7.4 CLEANING

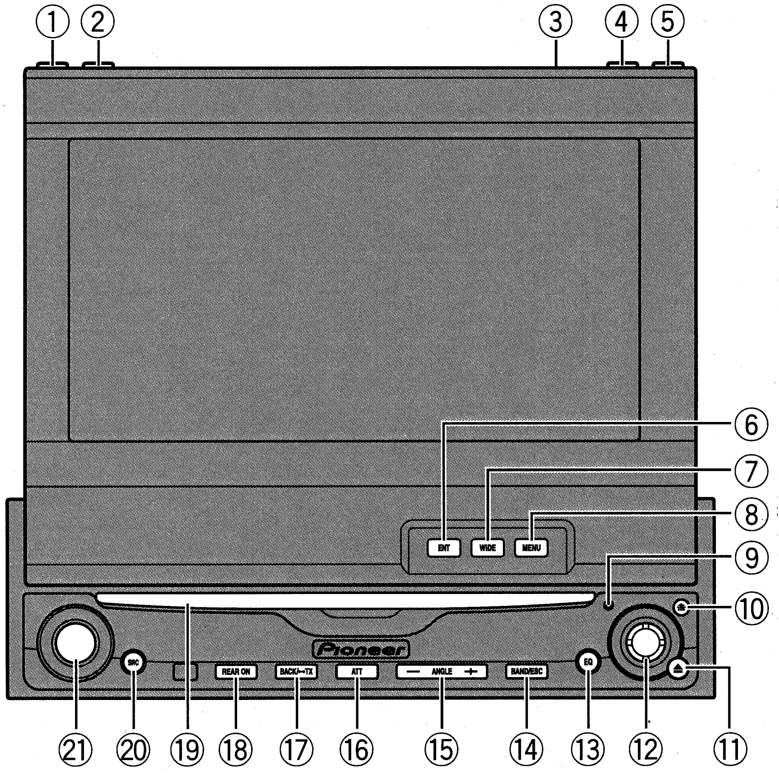
Before shipping out the product, be sure to clean the following portions by using the prescribed cleaning tools:

Portions to be cleaned	Cleaning tools
DVD pickup lenses	Cleaning liquid : GEM1004 Cleaning paper : GED-008

Portions to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008

8. OPERATIONS

● UC model



Head unit

① **DISPLAY button**
Press to select different displays.

② **PGM button**
Press to operate the preprogrammed functions for each source.

③ **Ambient light sensor**
Senses ambient light. This system automatically adjusts the brightness of the display to compensate for ambient light.

④ **FLIP DOWN/CLOCK button**
Press to turn the LCD panel horizontal temporarily when the LCD panel is upright.
Press to turn the clock display on or off when the LCD panel is closed.

⑤ **OPEN/CLOSE button**
Press to open or close the LCD panel.

⑥ **ENTERTAINMENT button**
Press to switch between the background displays.

⑦ **WIDE button**
Press to select a desired mode for enlarging a 4:3 picture to a 16:9 one.

⑧ **MENU button**
Press and hold to display the picture adjustment menu.

⑨ **RESET button**
Press to return to the factory settings (initial settings).

⑩ **DETACH button**
Press to remove the front panel from the head unit.

⑪ **EJECT button**
Press to eject a disc from this unit.

⑫ **Joystick**
Move to do manual seek tuning, fast forward, reverse and track search controls. Also used for controlling functions.

⑬ **EQ button**
Press to select various equalizer curves.

⑭ **BAND/ESC button**
Press to select among three FM and one AM bands and cancel the control mode of functions.

⑮ **ANGLE (+/–) button**
Press to change the LCD panel angle.

⑯ **ATT button**
Press to quickly lower the volume level, by about 90%. Press once more to return to the original volume level.

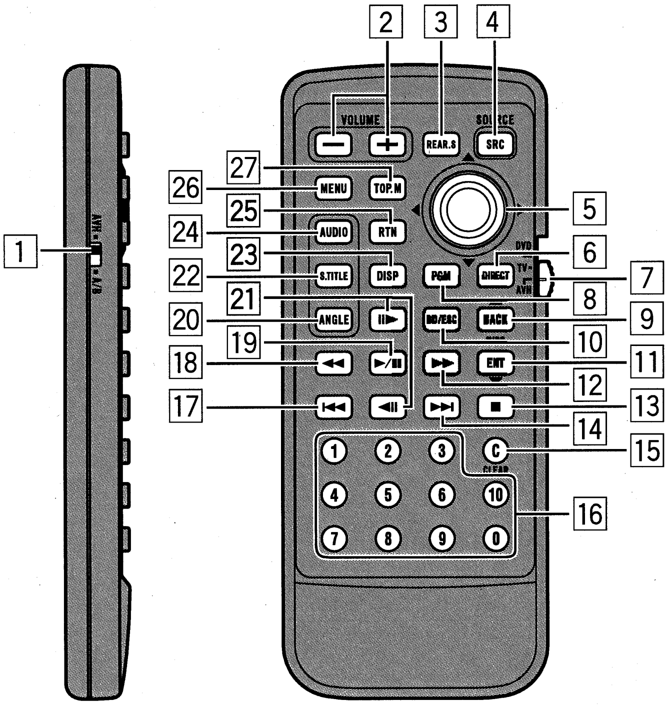
⑰ **BACK button**
Press to return to the previous display.

⑱ **REAR ON button**
Press to watch a DVD/Video CD on a rear display if **DVD** (built-in DVD player) is not selected as the source.

⑲ **Disc loading slot**
Insert a disc to play.

⑳ **SOURCE button**
This unit is turned on by selecting a source. Press to cycle through all of the available sources.

㉑ **VOLUME**
Rotate to increase or decrease the volume. ▣


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
VOLUME
SOURCE
REAR.S
SRC
MENU
TOP.M
AUDIO
RTN
S.TITLE
DISP
PGM
DIRECT
DVD
TV
AVH
ANGLE
BACK
ENT
C
CLEAR
1
2
3
4
5
6
7
8
9
10
0
AVH
A/B

Remote control

1 Remote control selection switch

Switch to change the setting of the remote control.

2 VOLUME button

Press to increase or decrease the volume.

3 REAR.S button

Press to watch a DVD/Video CD on a rear display if **DVD** (built-in DVD player) is not selected as the source.

4 SOURCE button

This unit is turned on by selecting a source. Press to cycle through all of the available sources.

5 Joystick

Move to do manual seek tuning, fast forward, reverse and track search controls. Also used for controlling functions.

6 DIRECT button

Press to do direct channel select when using an XM tuner.

7 Remote control operation mode switch

Switch the operation mode between **AVH**, **DVD** and **TV** modes. Normally, set to **AVH**.

- **AVH** – For common operation of this unit
- **DVD** – Only for DVD player operation
- **TV** – Only for TV tuner operation

8 PGM button

Press to operate the preprogrammed functions for each source.

9 BACK button

Press to return to the previous display.

10 BAND/ESC button
Press to select among three FM and one AM bands and cancel the control mode of functions.

11 ENTERTAINMENT button
Press to switch between the background displays.

12 FORWARD (►►) button
Press to perform fast forward playback.

13 STOP (■) button
Press to stop playback.

14 NEXT (►►I) button
Press to go to the next track (chapter).

15 CLEAR button
Press to cancel the input number while **0–10** are used.

16 0–10 buttons
Press to directly select the desired track, preset tuning and disc. **1–6** buttons can operate the preset tuning for the tuner or disc number search for the multi-CD player.

17 PREVIOUS (I◄◄) button
Press to return to the previous track (chapter).

18 REVERSE (◄◄) button
Press to perform fast reverse playback.

19 PLAY/PAUSE (►/II) button
Press to switch sequentially between playback and pause play.

20 ANGLE button
Press to change the viewing angle during DVD playback.

21 STEP (II►/◄II) button
Press to move ahead one frame at a time during DVD/VideoCD playback. Press and hold for one second to activate slow playback.

22 SUBTITLE (SUB.T) button
Press to change the subtitle language during DVD playback.

23 DISPLAY button
Press to select different displays.

24 AUDIO button
Press to change the audio language during DVD playback.

25 RETURN button
Press to display the PBC (playback control) menu during PBC playback.

26 MENU button
Press to display the DVD menu during DVD playback.

27 TOP MENU (TOP.M) button
Press to return to the top menu during DVD playback.

Switching the remote control operation mode switch

There are three remote control operation modes on the remote control.

AVH mode operation

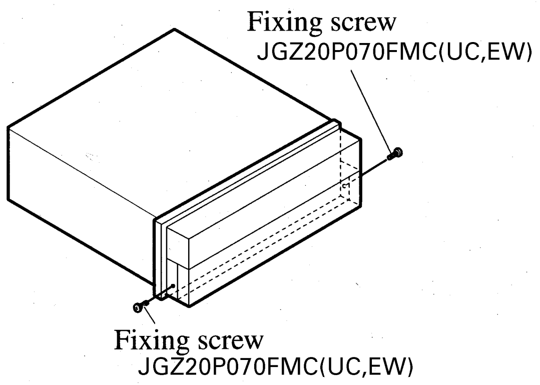
When operating this unit by remote control, normally switch the mode to **AVH**.

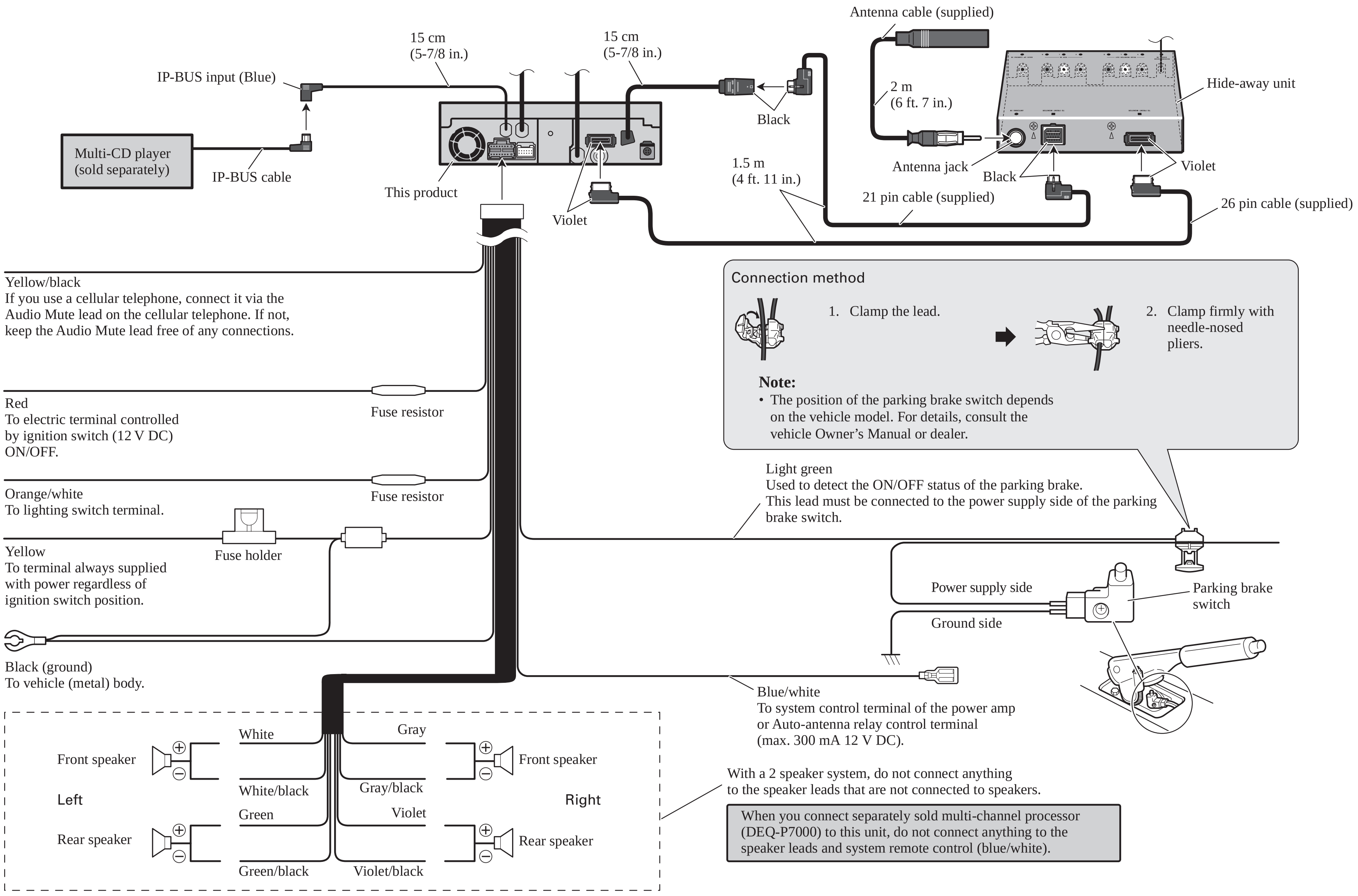
- The joystick on the remote control can perform the same operations as it on the head unit. Furthermore, the joystick can perform the same operations as the touch panel keys ▲, ▼, ◄ and ►.

Fixing the front panel

If you do not operate the removing and attaching the front panel function, use the supplied fixing screws to fix the front panel to this unit.

- **Fix the front panel to the unit using fixing screws after removing the front panel.**


Fixing screw
JGZ20P070FMC(UC,EW)
Fixing screw
JGZ20P070FMC(UC,EW)


Multi-CD player (sold separately)
IP-BUS cable
IP-BUS input (Blue)
15 cm (5-7/8 in.)
This product
15 cm (5-7/8 in.)
Violet
Black
1.5 m (4 ft. 11 in.)
Antenna cable (supplied)
2 m (6 ft. 7 in.)
Antenna jack
Black
Hide-away unit
Violet
21 pin cable (supplied)
26 pin cable (supplied)
Fuse resistor
Fuse resistor
Fuse holder
Power supply side
Ground side
Parking brake switch
Front speaker
Left
Rear speaker
White
White/black
Green
Green/black
Gray
Gray/black
Violet
Violet/black
Front speaker
Right
Rear speaker

Yellow/black
If you use a cellular telephone, connect it via the Audio Mute lead on the cellular telephone. If not, keep the Audio Mute lead free of any connections.

Red
To electric terminal controlled by ignition switch (12 V DC) ON/OFF.

Orange/white
To lighting switch terminal.

Yellow
To terminal always supplied with power regardless of ignition switch position.

Black (ground)
To vehicle (metal) body.

Connection method

1. Clamp the lead.
2. Clamp firmly with needle-nosed pliers.

Note:

- The position of the parking brake switch depends on the vehicle model. For details, consult the vehicle Owner's Manual or dealer.

Light green
Used to detect the ON/OFF status of the parking brake.
This lead must be connected to the power supply side of the parking brake switch.

Blue/white
To system control terminal of the power amp or Auto-antenna relay control terminal (max. 300 mA 12 V DC).

With a 2 speaker system, do not connect anything to the speaker leads that are not connected to speakers.

When you connect separately sold multi-channel processor (DEQ-P7000) to this unit, do not connect anything to the speaker leads and system remote control (blue/white).